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Salaries

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SALARIES 1990

ANALYSIS OF THE AMERICAN CHEMICAL SOCIETY'S 1990 SURVEY OF SALARIES AND EMPLOYMENT

American Chemical Society
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July 1990

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ACKNOWLEDGEMENTS

This report presents detailed results of the 1990 ACS Salary and Employment Status Survey. A summary of the survey findings was published in the July 9, 1990 issue of *Chemical and Engineering News*.

General oversight of the survey and its analysis was provided by the ACS joint Board-Council Committee on Economic Status, headed by John S. Connolly[1], and by its subcommittee on surveys, chaired by Jack G. Kay[2]. The committee expresses its gratitude to the approximately 40,000 members who provided a valuable service to the profession by completing the survey questionnaire.

Joan Burrelli and Alicia McGinnis of ACS Market and Business Analysis prepared this report. Dr. Burrelli wrote the summary and comment on the following pages. Corinne Bordieri prepared the graphs.

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[2] Dr. Jack G. Kay, Department of Chemistry, Drexel University, Philadelphia, Pennsylvania.

SUMMARY AND COMMENT

This year, the economic situation of ACS members as a whole continued to be relatively good. The unemployment rate for chemical engineers was the lowest in more than a decade, although salaries barely increased over last year's. Median salaries increased moderately for chemists and unemployment for chemists remained low.

Salaries

Chemical engineers' median salaries, for all degree levels, were fairly flat for the third year in a row. The overall median salary for PhD industrial chemical engineers was $65,000 compared with $64,700 last year, master's degree chemical engineers reported a median salary of $55,000 compared with $53,000 last year, and bachelor's degree chemical engineers' median salary was $49,400 compared with $47,700 last year. Median salaries of new BS chemical engineers, however, have kept pace with inflation.

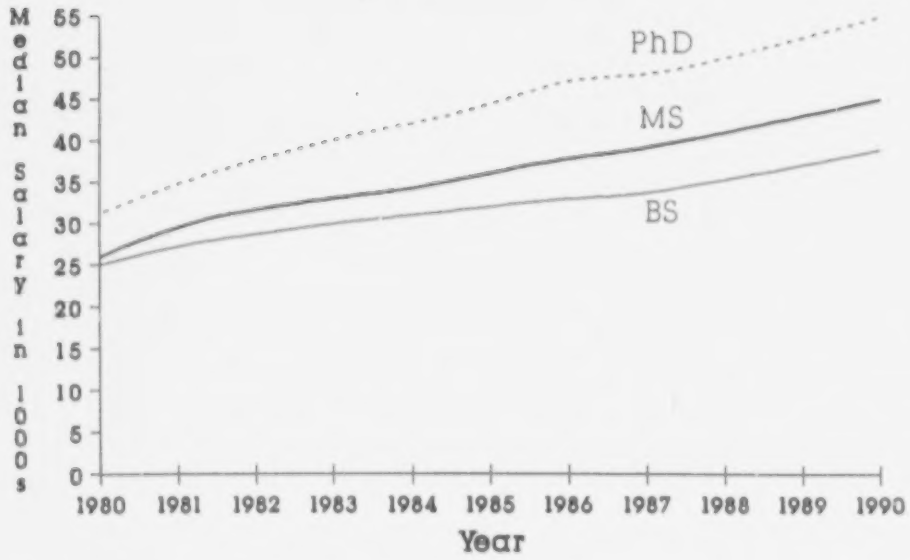
Among chemists, overall median salaries showed modest increases over those of last year. As of March 1, 1990 median salaries for ACS member chemists were:

$55,000 for PhD,	up 4.8%	from 1989,	down	0.4% in constant dollars
$45,000 for MS,	up 4.6%	from 1989,	down	0.5% in constant dollars
$39,000 for BS,	up 5.4%	from 1989,	up	0.2% in constant dollars

The Consumer Price Index rose 5.2% from March 1989 to March 1990.

With the exception of 1987, when salaries barely increased over those of the previous year, overall salaries for chemists have increased about six percent per year (in current dollars) since 1980. In constant dollars, median salaries of BS chemists have remained relatively unchanged and median salaries of PhD chemists have increased about 1% per year since 1980.

Median Salaries of Chemists 1980-1990
(in current dollars)



Source: ACS Salary Surveys

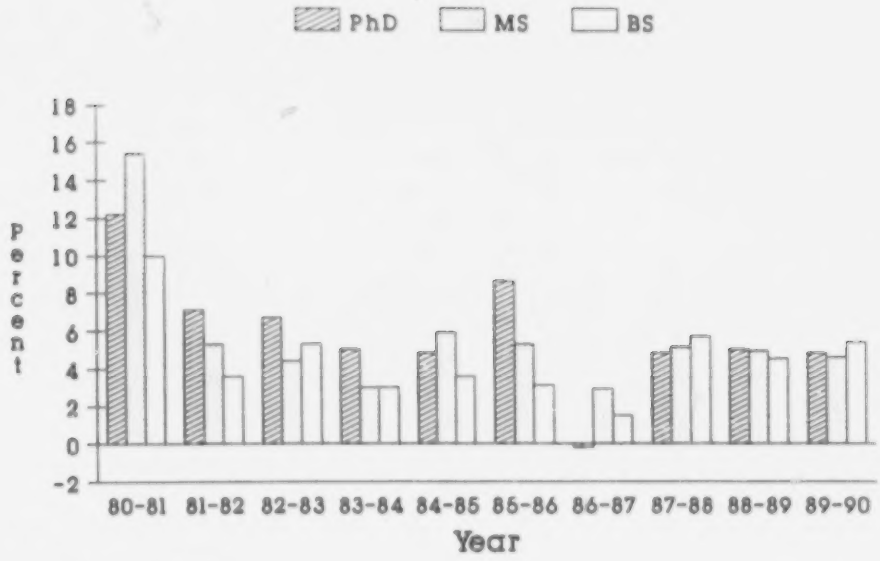
Chemists' Median Salaries*
(in current dollars)

Degree	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
B.S.	$25.0	$27.5	$28.5	$30.0	$30.9	$32.0	$33.0	$33.5	$35.4	$37.0	$39.0
M.S.	26.0	30.0	31.6	33.0	34.0	36.0	37.9	39.0	41.0	43.0	45.0
Ph.D.	31.2	35.0	37.5	40.0	42.0	44.0	47.8	47.7	50.0	52.5	55.0
All Chemists	28.9	32.0	34.7	36.0	38.0	40.0	42.5	42.5	45.0	47.3	49.8

* Base annual salary on March 1 of the year (in thousands of dollars)

Source: ACS Salary Surveys

Changes in Chemists' Median Salaries 1980-1990



Source: ACS Salary Surveys

Changes in Chemists' Median Salaries* 1980-1990

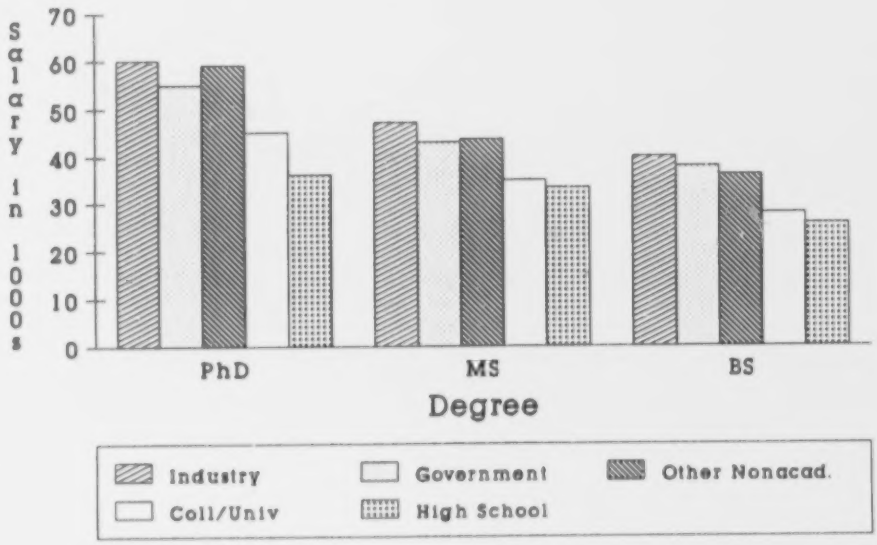
Degree	1980-1981	1981-1982	1982-1983	1983-1984	1984-1985	1985-1986	1986-1987	1987-1988	1988-1989	1989-1990
B.S.	10.0	3.6	5.3	3.0	3.5	3.1	1.5	5.7	4.5	5.4
M.S.	15.4	5.3	4.4	3.0	5.9	5.3	2.9	5.1	4.9	4.6
Ph.D.	12.2	17.1	6.7	5.0	4.8	8.6	-0.2	4.8	5.0	4.8
All Chemists	10.7	8.4	3.7	5.6	5.3	6.3	--	5.9	5.1	5.3

* In current dollars

Source: Calculations based on ACS Salary Survey data

Chemists' salaries tend to be highest in private industry and lowest in high schools.

Median Salaries of Chemists By Employer Type, 1990

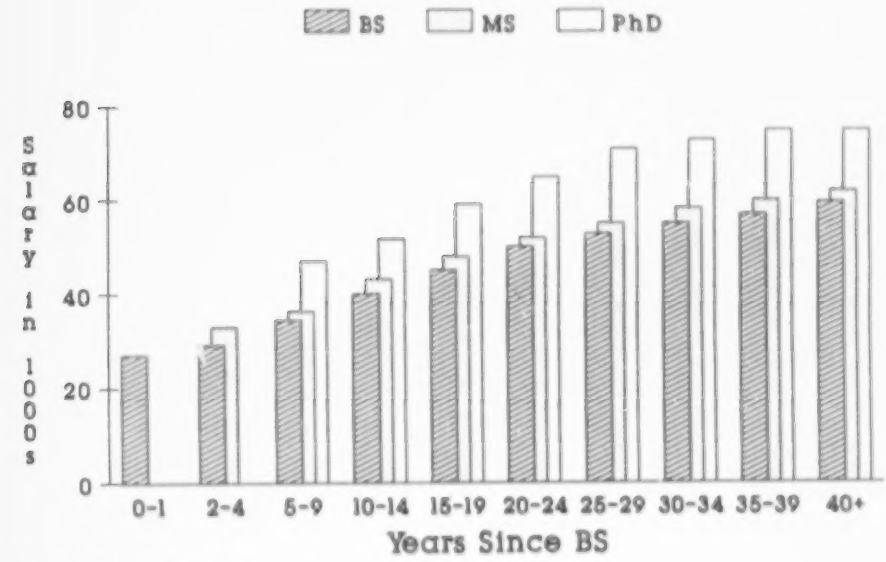


Source: ACS Salary Survey

Although academic salaries have always been lower than those in industry or government, they have, in the past decade, increased faster than salaries in either industry or government. Salaries of PhD chemists in industry increased on average 7% per year from 1980 to 1990, those in government increased 6%, and those in academe increased 8%. For all employer types, PhD salary increases were highest in the early and later 1980s, and were lowest in 1985. Median salary increases for PhD chemists this year were 5% for those employed in academe and 3% for those employed in industry and in government.

The greatest influences on nonacademic salaries are type of employer, length of experience, and degree of responsibility. Chemists employed in industry generally earn more than those employed in government or the service sector. Salaries also rise with increased experience and responsibility. Other influences on nonacademic salaries are type of industry (for industrial chemists) and work function. Salaries for chemists employed in industry are generally higher for those working in the petroleum industry and for those in management.

Industrial Chemists' Median Salaries by Degree and Years Since the BS



Source: 1990 ACS Salary Survey

Salaries also differ by geographic region. The median salary of PhDs in industry ranged from a high of $61,000 in the Pacific and Middle Atlantic regions to a low of $55,700 in the Mountain region. Regional differences in salaries are largely a function of differences in length of experience and type of industry. Within categories of experience and within industries, salaries are fairly similar across regions. For example, among PhD chemists employed in the pharmaceuticals industry with 10-14 years since the BS, the median salary is $55,000 for both those in the Pacific region (generally the highest paying) and those in the Mountain region (generally the lowest paying).

The greatest influences on academic salaries are academic rank, school type, and work function (e.g., teaching, administration). Academic salaries are generally higher for full professors, those in public institutions, those in departments granting PhD degrees, and those in research as opposed to teaching. Salaries of tenured faculty are somewhat higher than those of nontenured faculty. Within PhD-granting departments, salaries are higher in private schools than in public schools. Within BS-granting departments, salaries are higher in public schools than in private schools. For assistant and associate professors, length of experience has little influence on salaries. The median salary for PhD associate professors with 10-14 years since the BS and on 9 or 10 month contracts is $37,100; that for those with 20-24 years since the BS is $38,000.

Salaries for women chemists are generally lower than those for men. The median salary for women PhDs in industry was 84% of that for men. The difference in men's and women's median salaries is partly due to differences in experience. When length of experience is taken in account, the salary gap narrows. For example, the median salary for women PhDs in industry with 15-19 years since the BS is 98% of that for men with comparable experience. The difference in men's and women's median salaries can also be explained by differences in work function and responsibility, e.g., men are more likely than women to be in management.

Among academic chemists, the difference in men's and women's median salaries is partly due to differences in rank. Women chemists in academia are less likely than men chemists to be full professors. The median salaries of men and women chemists with comparable rank are more nearly equal. For example, the median salary of women PhDs on 9 or 10 month contracts is 95% that of men's for full, associate, and assistant professors.

A more complete analysis of the salaries, employment status, and demographic characteristics of women chemists can be found in the ACS report *Women Chemists 1990*.

Employment and Unemployment

The overall unemployment rate among chemists in spring 1990 was 1.1%. The overall unemployment rate among chemical engineers was 1.0%, down from 1.5% last year.

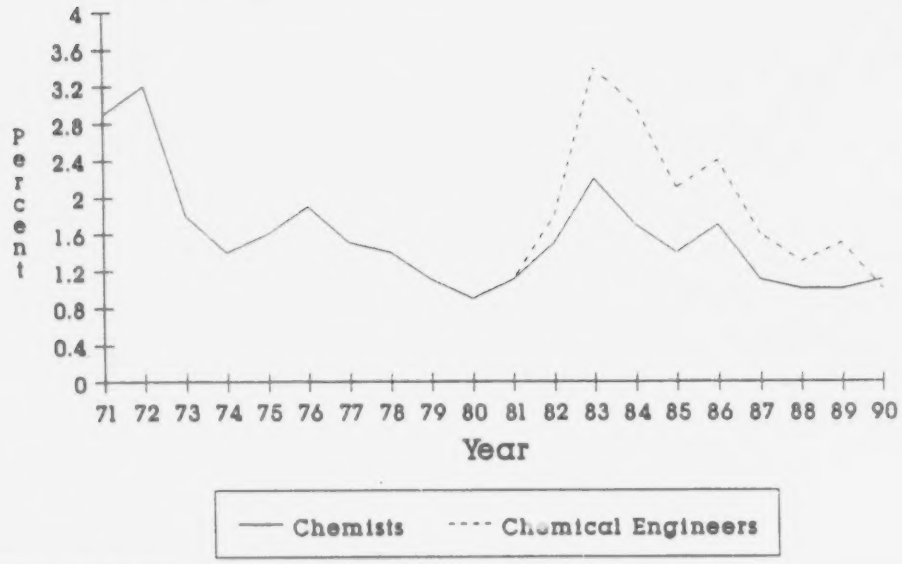
The percent of chemists experiencing extended periods of unemployment was down. This year only 19% reported they had been unemployed for more than one year, last year about 30% had been unemployed that long.

Of chemists in the labor force at the time of the survey, 3% had been unemployed at some time during 1989. More than half of these reported they were unemployed for three months or less in 1989.

Unemployment rates were higher for BS and MS chemists, for "other nonacademic" chemists, and for either younger or older chemists. Chemists in "other nonacademic" employment had a higher rate of unemployment (2.1%) than chemists in any other type of employment: 0.6% for academic chemists, 0.4% for government chemists, and 1.2% for industrial chemists.

Further information about this survey may be obtained from Joan Burrelli (202) 872-4433.

Unemployment Rates of Chemists and Chemical Engineers, 1971-1990



Source: ACS Salary Surveys

A METHOD FOR ESTIMATING AVERAGE SALARIES

A compact summary of the information in this report is possible through a statistical technique known as multiple regression. This technique identifies which characteristics have the greatest effect on salaries, and results in a formula for estimating the average salary of respondents with certain characteristics.

For industrial chemists and chemical engineers responding to the 1990 survey, the three characteristics that account for most of the variation among salaries are highest degree, experience (years since B.S. is used to measure experience in ACS surveys), and work function.

Table I displays the factors needed to estimate the average salary for any group of respondents who are industrial chemists with any combination of the listed characteristics.

For example, to estimate the average salary in March 1990 for industrial chemists with the doctorate, 15 to 19 years of experience, and working in R&D management, find the corresponding factors in Table I and multiply them together with the base salary for all industrial chemists:

($27,484) x (1.300) x (1.600) x (1.222) = $69,858

Table II displays the factors needed to estimate the average salary for chemical engineers. For example, to estimate the average salary in March 1990 for industrial chemical engineers with a master's degree, 15 to 19 years of experience, and working in R&D management, find the corresponding factors in Table II and multiply them together with the base salary for all industrial chemical engineers:

($30,376) x (1.043) x (1.620) x (1.233) = $63,284

For academic chemists responding to the 1990 survey, the characteristics that account for most of the variation among salaries are rank, academic work function, length of contract (9 or 10 month or 11 or 12 month), the highest degree offered by the respondent's department, and the control (public or private) of the respondent's institution.

Table III displays the factors needed to estimate the average salary for any group of respondents who are PhD academic chemists employed full-time in colleges or universities with any combination of the listed characteristics.

For example, to estimate the average salary in March 1990 for academic chemists at the rank of full professor, engaged primarily in research, on 11 or 12 month contracts, and employed in PhD-granting departments in public universities, find the corresponding factors in Table III and multiply them together with the base salary for all academic chemists:

($28,838) x (1.682) x (1.109) x (1.286) x (1.157) x (1.000) = $80,038

Averages estimated using this method should be interpreted with caution, for two reasons. First, and more important, is that the relationship between salary and employment characteristics is not exact. Variations due to employer (such as size of company and geographic location), or to individual differences (such as ability and number of people supervised), and other characteristics prohibit perfect estimation of an individual's salary. Secondly, the factors shown in the tables are estimates derived from a sample of chemists rather than the entire population of chemists, and as such are subject to the imprecision associated with sampling procedures.

Table I

SALARY FACTORS FOR INDUSTRIAL CHEMISTS

BASE SALARY	$27,484
DEGREE:	
Bachelor's	1.000
Master's	1.062
Doctorate	1.300
MATURITY: (Years Since Receiving B.S.)	
0-1	1.000
2-4	1.080
5-9	1.273
10-14	1.445
15-19	1.600
20-24	1.746
25-29	1.861
30-34	1.934
35-39	1.998
40 or more	2.025
WORK FUNCTION:	
Basic Research	1.000
R&D Management	1.222
Applied Research	.983
General Management	1.236
Marketing	1.055
Production	.920
Health and Safety	1.040
Forensic/Lab Analysis	.872
Teaching	.935
Writing	.910
Chemistry Information Services	.969
Computer Programming	.970
Consulting	1.057
Other	.996

Table II

SALARY FACTORS FOR INDUSTRIAL CHEMICAL ENGINEERS

BASE SALARY	$30,376
DEGREE:	
Bachelor's	1.000
Master's	1.043
Doctorate	1.234
MATURITY: (Years Since Receiving B.S.)	
0-1	1.000
2-4	.120
5-9	1.288
10-14	1.476
15-19	1.620
20-24	1.818
25-29	1.912
30-34	2.053
35-39	2.053
40 or more	1.990
WORK FUNCTION:	
Basic Research	1.000
R&D Management	1.233
Applied Research	.996
General Management	1.303
Marketing	1.068
Production	.956
Health and Safety	.996
Forensic/Lab Analysis	.914
Teaching	.741
Writing	.886
Chemistry Information Services	.862
Computer Programming	1.010
Consulting	1.046
Other	1.055

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TECHNICAL NOTES

The target population of the 1990 Salary and Employment Status Survey was those ACS members who had U.S. mailing addresses, were not older than 70, and had neither student, retired, nor emeritus status. On January 31, 1990 the ACS membership totalled 88,810. The survey questionnaires were mailed to these 88,810 members by bulk mail during the week of February 26. By the May 18 cut-off date, 39,336 (44.3%) usable questionnaires had been returned.

Definitions

For the purposes of the survey analysis only, the following definitions were used:

Chemist:	A respondent who indicated a work specialty of chemistry or biochemistry (categories 2 through 15 of Part I, Question 2 on the questionnaire) or a non-chemistry work specialty (categories 16 and 17) and a degree field of chemistry or biochemistry.
Chemical Engineer:	A respondent who indicated a work specialty of chemical engineering or a degree field of chemical engineering (category 1 of Part I, Question 2 on the questionnaire).
Unemployed:	A respondent who is unemployed and seeking employment (category 4 of Part I, Question 3 on the questionnaire).

This report represents the respondents' principal annual salaries as of March 1, 1990. The respondent's age is given as of March 1, 1990. A respondent's geographic region refers to place of employment. A list of geographic regions and their member states is on page 22 of this report.

Proportions

The proportion of people falling within a certain cell in one of the tables is a sample proportion. The sample proportion is used to make statements about the corresponding population proportion, but, of course, the sample proportion generally is not exactly equal to the population proportion. A useful estimate of the representativeness of the sample proportion is the confidence interval. Such an interval estimate is illustrated in the following statement: "We assert with 95% confidence that the population proportion is between 0.04 and 0.06." A simple but adequate formula for a confidence interval centered on the sample proportion is

$$p_{(lower)} = \hat{p} - z\,[\hat{p}(1 - \hat{p})/n]^{1/2}$$
$$\text{and } p_{(upper)} = \hat{p} + z\,[\hat{p}(1 - \hat{p})/n]^{1/2}$$

where $p_{(lower)}$ = lower boundary of the interval
$p_{(upper)}$ = upper boundary of the interval
$\hat{p}$ = the sample proportion
z = a function of the level of confidence and is found in a table of the standard normal distribution.
n = the sample size

Inspection of the formula shows that the width of the confidence interval is inversely proportional to the square root of the sample size, so that proportions derived from small samples are not as precise as ones drawn from large samples. Also, if non-respondents differ from respondents with regard to the characteristics under consideration, the formula will overstate precision because the formula is based on assumption of 100% response.

Suppose a confidence interval is required for a group containing 1900 sample members. If the sample contains 95 persons with a specific characteristic, then the numbers that go into the formula are $p = 95/1900 = 0.05$ and $n = 1900$. For a 95% confidence interval, z is about 2. Putting these numbers into the formula above we have:

$$p_{(lower)} = \hat{p} - z\,[\hat{p}(1 - \hat{p})/n]^{1/2}$$
$$= 0.05 - 2\,[0.05(0.95)/1900]^{1/2}$$
$$= 0.05 - 0.01$$
$$= 0.04$$

$$\text{and similarly, } p_{(upper)} = 0.05 + 0.01$$
$$= 0.06$$

Thus, a 95% confidence interval for p is from 4.0% to 6.0%. Although we cannot say that the population proportion is exactly 5.0%, we can be confident that it is between 4.0% and 6.0%. The 95% level of confidence means roughly that if this procedure were followed a large number of times using different samples of the same size, the population proportion would be within the calculated interval about 95% of the time.

Small Cell Count

If the number of responses in a cell of a salary table is small, then the sample salary statistics for that cell may not accurately estimate the corresponding population salary statistics. In general, a cell containing fewer than 15 respor.ses does not provide a useful estimate of the median salary, and a cell containing fewer than 25 responses does not provide a useful estimate of the 25th or the 75th salary percentile. For this reason, cells containing fewer than 15 responses were suppressed in the tables in this book.

Median

If a sample of size n is arranged in ascending order of magnitude, the median Md is given by the ((n + 1)/2)th value. If (n +1)/2 is not an integer, then the median is a weighted average of the two values whose ranks are closest to (n + 1)/2.

Discrepancies Among Tables

Some pairs of tables contain totals that should be identical but are not. For example, two tables that represent information about PhD respondents should show the same total number of PhDs. They might, however, show different totals. To illustrate, if one table groups the PhDs according to specialty and other groups them according to geographic region, the totals will differ unless the number who did not indicate their specialty is the same as the number who did not indicate their geographic region.

Comparing Salaries

Often questions arise concerning B.S. chemists' salaries as compared with M.S. chemists', or women's salaries as compared with men's. These and similar comparisons require caution.

Statistical tests should be performed to determined whether observed differences in salaries of various sample groups could be mere chance occurrences resulting from peculiarities of the sample. Whether a difference in salaries is "statistically significant" depends not only on the magnitude of the difference but also on the sample size and the magnitude of the sample standard deviations.

Discussion of statistical tests of significance can be found in *Introductory Statistics for Business and Economics* by Thomas H. Wonnacott and Ronald J. Wonnacott, N.Y.: Wiley, 1984; and other similar texts.

GEOGRAPHIC REGIONS

PACIFIC

Alaska
California
Hawaii
Oregon
Washington

MOUNTAIN

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

WEST NORTH CENTRAL

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

WEST SOUTH CENTRAL

Arkansas
Lousiana
Oklahoma
Texas

EAST SOUTH CENTRAL

Illinois
Indiana
Michigan
Ohio
Wisconsin

EAST SOUTH CENTRAL

Alabama
Kentucky
Mississippi
Tennessee

MIDDLE ATLANTIC

New Jersey
New York
Pennsylvania

SOUTH ATLANTIC

Delaware
District of Columbia
Florida
Georgia
Maryland
North Carolina
South Carolina
Virginia
West Virginia

NEW ENGLAND

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Table 1.1.1

SALARIES of BS CHEMISTS employed FULL-TIME
by EMPLOYER TYPE and YEARS SINCE BS
1990 ACS Salary Survey

TYPE OF EMPLOYER & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Industry						
Total	5782	43,571	18,805	32,000	40,000	50,880
0-1	156	27,315	5,638	24,045	27,000	30,000
2-4	791	29,531	5,527	26,000	29,150	32,800
5-9	1302	34,950	7,539	30,000	34,500	39,000
10-14	1055	41,611	10,337	35,000	40,000	47,800
15-19	703	47,300	14,232	38,800	45,000	54,000
20-24	467	52,834	17,252	42,125	50,000	61,000
25-29	442	55,055	18,370	42,500	52,800	64,272
30-34	373	58,662	24,010	45,228	55,000	66,500
35-39	331	60,786	27,073	47,000	57,000	67,250
40 or more	162	65,688	41,270	46,500	59,500	73,600
Government						
Total	789	39,243	12,028	30,000	37,872	46,500
2-4	74	25,820	5,219	21,880	25,185	29,000
5-9	150	31,512	6,573	27,000	30,448	35,904
10-14	125	36,220	7,335	30,948	36,000	40,600
15-19	129	40,864	9,283	34,000	40,200	47,572
20-24	94	44,651	10,942	37,000	43,500	49,701
25-29	90	47,306	12,038	38,000	46,931	55,381
30-34	45	49,548	10,622	43,000	52,353	56,000
35-39	43	48,212	11,957	38,800	46,530	55,200
40 or more	29	51,642	14,322	43,700	50,000	62,000
Other Nonacademic						
Total	928	43,373	26,318	28,681	36,146	50,000
0-1	24	24,292	7,075	20,644	21,650	30,525
2-4	151	26,803	6,913	22,000	26,175	30,000
5-9	235	34,530	13,577	28,000	32,052	37,000
10-14	148	42,075	13,556	32,825	40,320	47,250
15-19	94	47,132	20,374	35,000	41,750	53,000
20-24	75	54,828	26,545	40,000	50,200	60,000
25-29	65	59,627	32,776	40,000	53,000	68,000
30-34	58	58,279	25,307	45,500	54,500	70,000
35-39	44	62,722	45,282	40,675	50,000	69,500
40 or more	34	80,016	57,011	51,000	64,500	83,000
High School						
Total	61	27,048	8,343	21,600	25,700	32,000
College or University						
Total	205	31,371	14,311	22,500	28,000	35,000
2-4	35	22,852	5,704	19,800	21,672	27,500
5-9	43	28,020	9,556	23,000	25,000	31,300
10-14	24	30,479	10,605	21,500	28,750	34,500
15-19	29	33,179	13,259	24,600	31,500	40,000
20-24	21	36,190	12,254	28,000	35,000	41,500
25-29	15	39,937	12,593	28,000	39,362	48,972

Note: Cells with fewer than 15 cases have been suppressed.

Table 1.1.2

SALARIES of MS CHEMISTS employed FULL-TIME
by EMPLOYER TYPE and YEARS SINCE BS
1990 ACS Salary Survey

TYPE OF EMPLOYER & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Industry						
Total	3627	50,469	18,140	39,000	47,200	58,000
2-4	86	32,638	4,626	30,450	33,000	35,000
5-9	579	37,066	6,640	32,600	36,400	40,040
10-14	724	44.702	10,051	38,211	43,250	50,000
15-19	644	49,558	12,028	42,000	48,000	55,788
20-24	517	55,368	18,324	45,000	52,000	63,000
25-29	390	57,808	16,947	47,000	55,000	66,227
30-34	281	60,806	18,080	49,000	58,250	69,739
35-39	249	62,952	21,159	50,000	60,000	72,000
40 or more	157	67,337	36,634	50,400	62,000	75,000
Government						
Total	573	43,917	12,840	35,000	43,000	51,000
5-9	78	32,753	8,347	27,745	32,693	37,000
10-14	83	37,025	7,607	30,887	37,019	42,601
15-19	99	42,159	8,526	36,000	42,989	48,000
20-24	102	46,560	10,879	37,859	46,931	53,000
25-29	68	49,404	11,069	41,500	48,687	55,160
30-34	63	51,969	14,063	39,500	50,000	60,000
35-39	51	49,122	14,391	37,500	46,571	58,732
40 or more	22	58,512	15,865	48,000	57,700	69,086
Other Nonacademic						
Total	515	48,292	24,094	34,000	43,700	57,200
5-9	82	33,557	8,218	27,000	32,000	38,000
10-14	83	40,745	14,185	31,164	40,000	48,000
15-19	91	46,776	16,940	36,000	44,500	55,000
20-24	61	53,004	23,740	40,000	48,000	58,900
25-29	54	56,981	33,791	39,000	53,000	64,000
30-34	49	52,397	18,347	43,500	50,000	66,000
35-39	50	62,031	28,642	46,350	58,350	67,392
40 or more	35	62,973	38,375	42,000	62,000	73,000
High School						
Total	256	35,341	10,042	28,705	33,528	42,000
5-9	18	24,627	5,829	21,000	22,650	28,900
10-14	25	28,527	5,077	24,648	29,500	32,000
15-19	38	30,845	7,050	25,000	30,500	35,000
20-24	53	36,426	7,878	30,488	34,241	41,000
25-29	56	37,361	10,761	30,345	36,450	44,500
30-34	37	40,237	10,880	33,390	40,500	48,749
35-39	19	43,371	8,932	36,000	42,818	50,000
College or University						
Total	493	36,453	13,268	27,000	35,000	43,500
5-9	38	25,138	6,139	22,000	24,300	29,500
10-14	57	30,180	9,662	23,000	28,275	36,000
15-19	61	33,162	9,954	26,000	31,000	39,000
20-24	75	36,027	11,585	28,726	35,000	41,000
25-29	88	37,357	15,340	28,458	35,943	44,000
30-34	84	43,090	12,538	35,000	42,150	49,535
35-39	43	40,913	11,212	32,000	41,600	48,560
40 or more	39	43,567	15,989	32,000	42,000	48,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 1.1.3

SALARIES of PhD CHEMISTS employed FULL-TIME
by EMPLOYER TYPE and YEARS SINCE BS
1990 ACS Salary Survey

TYPE OF EMPLOYER & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Industry						
Total	9218	65,135	24,121	50,400	60,000	73,000
5-9	903	47,078	7,461	44,100	47,000	50,000
10-14	1867	52,789	9,124	47,000	51,600	57,000
15-19	1669	60,271	13,377	52,704	59,100	66,000
20-24	1541	67,936	22,800	57,000	65,000	75,000
25-29	1365	75,425	23,402	61,000	71,000	84,500
30-34	821	78,462	27,091	61,200	72,900	88,000
35-39	689	81,910	33,389	62,700	75,000	93,720
40 or more	361	83,551	44,229	61,980	75,000	94,000
Government						
Total	1443	56,063	14,295	45,440	55,000	65,444
5-9	75	41,515	9,025	35,800	42,000	45,500
10-14	186	46,189	9,725	40,000	45,000	52,200
15-19	179	49,885	11,808	41,100	48,300	58,000
20-24	246	55,627	13,035	47,000	55,000	63,000
25-29	294	58,553	12,184	50,000	57,480	67,500
30-34	190	62,094	14,908	52,000	62,000	72,000
35-39	149	63,756	14,631	55,000	65,444	75,000
40 or more	123	65,311	12,180	56,000	65,400	76,400
Other Nonacademic						
Total	1150	64,494	34,331	47,500	59,100	73,000
5-9	66	46,350	13,813	41,040	45,825	49,500
10-14	138	48,758	12,605	41,000	48,000	55,000
15-19	168	58,015	22,920	44,000	55,750	65,050
20-24	215	63,094	24,160	49,000	60,000	74,500
25-29	226	69,835	31,975	51,800	64,600	80,000
30-34	132	68,918	33,284	50,043	61,000	75,000
35-39	106	83,371	71,537	57,400	69,800	88,000
40 or more	98	74,527	27,735	58,500	70,000	84,000
High School						
Total	48	38,467	11,283	30,500	36,184	46,650
25-29	18	39,611	9,556	33,000	39,000	45,000
College or University						
Total	6049	49,244	19,522	35,000	45,000	58,000
5-9	341	30,866	7,171	27,000	30,000	35,000
10-14	758	35,857	8,968	30,000	34,500	40,000
15-19	716	40,336	12,405	31,225	38,000	47,000
20-24	840	48,667	18,935	36,000	45,000	56,000
25-29	1206	51,768	17,510	40,000	49,000	60,000
30-34	927	55,939	19,087	43,000	52,000	64,000
35-39	762	58,161	20,928	44,000	54,000	67,000
40 or more	498	63,793	22,516	48,000	60,000	76,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.1.1

SALARIES of INDUSTRIAL CHEMISTS employed FULL-TIME
by DEGREE and YEARS SINCE BS
1990 ACS Salary Survey

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS						
Total	5782	43,571	18,805	32,000	40,000	50,880
0-1	156	27,315	5,638	24,045	27,000	30,000
2-4	791	29,531	5,527	26,000	29,150	32,800
5-9	1302	34,950	7,539	30,000	34,500	39,000
10-14	1055	41,611	10,337	35,000	40,000	47,800
15-19	703	47,300	14,232	38,800	45,000	54,000
20-24	467	52,834	17,252	42,125	50,000	61,000
25-29	442	55,055	18,370	42,500	52,800	64,272
30-34	373	58,662	24,010	45,228	55,000	66,500
35-39	331	60,786	27,073	47,000	57,000	67,250
40 or more	162	65,688	41,270	46,500	59,500	73,600
MS						
Total	3627	50,469	18,140	39,000	47,200	58,000
2-4	86	32,638	4,626	30,450	33,000	35,000
5-9	579	37,066	6,640	32,600	36,400	40,040
10-14	724	44,702	10,051	38,211	43,250	50,000
15-19	644	49,558	12,028	42,000	48,000	55,788
20-24	517	55,368	18,324	45,000	52,000	63,000
25-29	390	57,808	16,947	47,000	55,000	66,227
30-34	281	60,806	18,080	49,000	58,250	69,739
35-39	249	62,952	21,159	50,000	60,000	72,000
40 or more	157	67,337	36,634	50,400	62,000	75,000
PhD						
Total	9218	65,135	24,121	50,400	60,000	73,000
5-9	903	47,078	7,461	44,100	47,000	50,000
10-14	1867	52,789	9,124	47,000	51,600	57,000
15-19	1669	60,271	13,377	52,704	59,100	66,000
20-24	1541	67,936	22,800	57,000	65,000	75,000
25-29	1365	75,425	23,402	61,000	71,000	84,500
30-34	821	78,462	27,091	61,200	72,900	88,000
35-39	689	81,910	33,389	62,700	75,000	93,720
40 or more	361	83,551	44,229	61,980	75,000	94,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.1

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by WORK SPECIALTY and YEARS SINCE BS
1990 ACS Salary Survey

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemistry						
Total	86	39,441	18,622	29,500	35,100	44,000
2-4	17	30,668	4,255	28,500	30,000	35,000
5-9	24	32,729	6,782	27,750	31,000	36,500
10-14	16	39,056	10,530	31,750	39,624	43,000
Biotechnology						
Total	86	38,786	13,948	29,200	34,875	45,000
2-4	17	30,661	7,093	24,200	29,200	34,500
5-9	32	34,435	8,096	28,738	33,000	42,000
General chemistry						
Total	285	45,175	29,887	32,000	40,000	53,520
2-4	34	28,874	4,398	26,640	28,500	32,000
5-9	51	35,376	8,422	30,000	34,700	38,098
10-14	64	42,933	11,274	36,200	41,000	49,250
15-19	33	43,858	13,975	34,100	40,000	51,000
20-24	30	56,268	12,554	48,136	55,000	65,000
25-29	19	51,324	18,085	40,000	52,600	65,000
30-34	23	59,882	19,211	49,000	55,000	68,000
35-39	16	53,958	22,774	41,000	56,050	67,500
Agricultural chemistry						
Total	221	40,681	17,169	29,580	35,862	48,000
2-4	28	26,596	5,360	22,750	26,200	29,950
5-9	56	32,643	6,904	27,530	33,265	36,450
10-14	46	38,176	10,118	30,000	35,881	45,000
15-19	26	46,222	13,872	35,000	44,500	54,000
20-24	17	52,076	16,463	44,000	47,832	56,460
30-34	16	53,510	16,019	41,000	50,833	65,250
35-39	16	58,731	27,615	48,700	55,250	61,000
Analytical chemistry						
Total	1865	39,921	13,271	31,000	37,500	46,000
0-1	41	27,861	5,052	25,000	26,100	30,000
2-4	271	28,938	4,795	25,800	28,600	32,000
5-9	443	33,887	6,782	29,040	33,000	38,200
10-14	370	39,469	8,458	34,320	38,750	44,220
15-19	236	43,996	11,426	37,175	42,670	49,500
20-24	165	49,095	18,354	38,500	47,300	54,750
25-29	134	50,241	14,619	41,800	48,400	58,000
30-34	112	51,955	14,804	39,750	50,810	61,600
35-39	68	51,054	13,696	42,620	50,000	60,400
40 or more	25	53,825	16,687	42,200	52,000	60,000
Clinical chemistry						
Total	33	40,144	15,885	26,750	38,000	48,000

Table 2.2.1 (Continued)

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Environmental chemistry						
Total	553	40,930	15,476	30,300	37,896	48,000
0-1	17	24,571	5,953	18,000	25,000	28,400
2-4	100	28,981	6,154	25,000	28,000	32,500
5-9	147	34,940	7,871	30,250	34,000	38,900
10-14	123	43,490	10,598	35,940	42,400	50,000
15-19	64	47,945	13,045	38,344	46,450	55,100
20-24	32	48,968	11,889	42,000	48,250	54,500
25-29	20	57,517	22,714	42,500	49,500	68,250
30-34	24	57,512	17,319	42,500	56,496	72,500
35-39	20	66,079	24,514	47,500	60,000	78,030
Inorganic chemistry						
Total	138	44,166	16,955	31,500	40,850	54,000
5-9	29	36,612	9,249	31,380	35,000	41,000
10-14	27	42,017	11,627	33,028	36,243	50,000
30-34	16	56,644	17,428	45,500	54,575	63,000
Materials science						
Total	267	46,419	16,281	35,500	42,000	55,000
2-4	18	31,195	4,508	28,500	32,000	34,000
5-9	55	37,351	8,102	31,980	36,000	41,000
10-14	48	43,146	9,507	36,000	43,000	48,150
15-19	39	47,000	17,118	38,600	43,000	52,000
20-24	17	48,567	16,687	34,000	45,600	64,000
25-29	23	56,876	19,195	42,000	54,800	65,000
30-34	24	56,921	13,487	50,055	58,400	63,000
35-39	24	56,599	12,690	45,000	56,000	65,500
Medicinal/Pharmaceutical						
Total	289	41,741	14,985	31,000	37,300	49,000
0-1	15	28,882	2,363	27,000	29,200	30,860
2-4	53	29,822	4,351	28,000	30,200	32,200
5-9	77	34,653	6,477	31,000	34,700	38,000
10-14	41	41,418	10,510	35,000	39,700	45,600
15-19	25	45,981	10,027	40,150	45,000	48,200
20-24	18	59,071	17,133	42,150	60,500	67,000
25-29	27	54,895	13,185	49,000	55,000	59,000
Organic chemistry						
Total	564	43,671	16,296	31,500	40,000	51,850
0-1	16	28,392	8,957	24,045	26,750	29,250
2-4	96	29,401	4,654	26,050	29,400	32,000
5-9	115	35,329	6,653	31,000	35,000	40,000
10-14	88	40,492	8,604	35,000	40,100	46,200
15-19	61	47,794	16,478	38,000	45,000	51,600
20-24	39	52,022	14,161	42,000	50,700	58,000
25-29	48	55,503	15,816	43,848	54,300	64,300
30-34	45	58,099	14,682	46,800	55,000	70,000
35-39	29	61,079	18,492	49,600	60,000	70,904
40 or more	27	64,210	17,364	52,000	63,000	73,000

Table 2.2.1 (Continued)

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Physical chemistry						
Total	92	47,448	17,661	34,325	43,650	54,250
5-9	19	36,131	8,744	28,600	37,187	42,000
Polymer chemistry						
Total	733	46,858	17,847	34,000	43,000	56,300
0-1	22	28,257	4,140	25,000	28,600	30,500
2-4	88	31,493	5,612	28,150	30,000	34,650
5-9	145	35,665	7,660	31,000	35,000	40,000
10-14	115	43,832	11,771	36,383	42,500	51,000
15-19	83	49,724	12,490	41,850	48,000	60,000
20-24	61	57,433	14,837	47,200	57,000	66,000
25-29	75	56,293	16,172	45,000	57,228	65,000
30-34	39	57,367	18,093	45,000	53,400	70,000
35-39	77	63,416	22,101	50,715	59,566	70,500
40 or more	28	63,171	24,525	50,000	60,000	71,500
Other chemical science						
Total	137	44,362	17,270	33,500	40,000	54,000
5-9	42	35,200	6,963	30,500	35,500	39,200
15-19	16	45,972	11,169	39,200	44,750	54,450
25-29	15	51,730	15,138	39,000	54,000	62,000
Business Administration						
Total	185	68,269	42,076	45,500	60,180	74,000
5-9	20	43,620	11,603	35,560	41,684	50,250
10-14	28	48,569	9,363	42,500	49,000	52,416
15-19	30	65,138	23,549	49,900	63,800	70,000
20-24	25	65,425	17,628	50,000	65,000	72,600
25-29	23	72,905	26,804	57,500	71,000	90,000
30-34	19	99,329	68,637	65,000	79,500	100,002
35-39	16	96,531	76,604	53,500	68,000	115,000
40 or more	15	92,232	48,460	60,180	85,000	108,000
Other non-chem						
Total	248	49,683	19,024	37,500	46,150	57,850
2-4	15	31,161	7,558	25,800	31,000	35,000
5-9	42	38,707	8,591	35,000	37,774	45,000
10-14	46	41,343	8,985	36,000	40,500	47,500
15-19	42	48,903	12,097	42,000	46,550	56,700
20-24	24	55,555	16,883	42,000	51,400	66,900
25-29	26	65,492	27,311	50,000	65,750	79,000
30-34	18	65,561	20,915	50,000	59,000	75,540
35-39	24	62,817	22,405	44,800	59,200	69,250

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.2

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by WORK FUNCTION and YEARS SINCE BS
1990 ACS Salary Survey

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
R&D Mgt						
Total	450	61,484	24,461	47,700	59,200	72,000
5-9	40	43,739	10,007	36,435	42,000	52,225
10-14	70	51,651	13,179	43,000	48,500	58,000
15-19	73	57,862	16,017	48,000	58,000	65,000
20-24	57	63,385	16,077	52,000	62,090	73,000
25-29	55	69,464	21,650	58,000	69,000	75,000
30-34	51	69,470	18,499	55,000	67,000	81,000
35-39	61	76,918	43,645	60,000	70,000	81,217
40 or more	28	68,156	17,152	55,000	65,000	82,000
Basic research						
Total	443	35,345	10,704	28,320	32,500	40,150
0-1	37	26,940	4,763	24,500	28,000	30,000
2-4	121	29,263	4,612	26,400	29,000	32,000
5-9	136	33,272	5,806	29,200	32,500	37,788
10-14	63	37,858	7,961	32,000	37,500	43,500
15-19	31	43,525	9,330	38,400	42,500	48,500
25-29	15	47,624	13,535	36,600	46,920	58,000
Applied research						
Total	1704	40,455	12,495	31,528	37,713	47,050
0-1	52	27,553	4,955	24,460	26,325	30,250
2-4	285	30,077	4,712	27,000	29,900	33,000
5-9	444	34,880	6,274	31,000	34,750	38,745
10-14	286	40,683	8,442	35,334	39,575	46,200
15-19	173	44,112	10,589	37,752	43,200	49,368
20-24	129	49,208	12,161	41,040	48,000	56,500
25-29	126	51,143	14,701	41,400	50,150	60,000
30-34	90	53,321	13,914	42,500	52,000	63,000
35-39	84	56,242	11,152	49,650	55,250	65,750
40 or more	35	53,231	13,797	44,000	52,000	65,000
General Mgt						
Total	427	58,203	34,051	40,000	51,000	67,500
2-4	23	34,774	7,117	30,000	34,500	40,000
5-9	61	37,751	9,158	32,000	35,952	42,000
10-14	91	46,311	11,326	39,000	45,000	53,000
15-19	68	56,297	19,845	45,000	52,800	62,800
20-24	44	65,260	27,318	51,012	63,457	76,000
25-29	38	68,516	22,986	52,600	66,500	80,600
30-34	42	74,232	33,791	57,000	71,000	80,000
35-39	35	75,089	34,030	49,000	64,000	100,000
40 or more	24	101,929	90,306	52,000	80,000	106,500

Table 2.2.2 (Continued)

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Marketing						
Total	559	47,845	16,828	36,000	45,000	56,400
2-4	51	31,523	8,555	27,000	31,000	34,400
5-9	121	38,100	8,616	32,500	37,800	43,000
10-14	101	44,881	11,163	37,000	44,000	50,000
15-19	77	50,516	13,109	41,000	49,900	57,060
20-24	52	61,506	19,456	49,500	59,000	68,000
25-29	48	56,963	14,801	47,000	54,800	66,000
30-34	36	57,502	16,020	46,500	54,500	66,748
35-39	41	57,614	21,680	42,600	56,100	63,000
40 or more	24	61,550	18,318	52,500	60,000	71,000
Production						
Total	1186	38,401	11,816	30,000	36,502	45,000
0-1	33	27,064	4,324	24,000	27,300	30,000
2-4	160	28,232	5,422	24,500	27,566	31,622
5-9	277	33,119	7,583	27,770	32,400	38,000
10-14	247	38,495	8,442	33,000	38,184	44,850
15-19	158	42,073	11,554	35,000	41,000	47,700
20-24	96	44,784	10,676	37,430	45,000	50,000
25-29	81	48,933	12,813	42,000	48,300	56,400
30-34	66	50,104	14,266	38,000	49,705	60,000
35-39	48	48,369	12,066	40,035	48,000	55,600
40 or more	20	45,612	13,382	34,000	43,100	55,130
Health & Safety						
Total	264	46,105	14,182	36,463	42,450	53,250
2-4	18	30,984	4,378	28,000	30,822	34,000
5-9	42	36,933	5,437	33,000	37,400	40,000
10-14	66	44,004	8,459	38,014	42,500	48,000
15-19	32	50,887	13,808	41,280	48,750	59,000
20-24	23	49,477	11,622	40,000	46,800	56,500
25-29	22	52,297	19,584	41,700	49,000	62,500
30-34	26	52,840	13,871	42,000	48,260	62,000
35-39	22	58,848	18,509	47,000	59,783	67,250
Forensics						
Total	286	34,187	10,936	27,000	32,000	39,000
2-4	57	26,049	5,098	22,200	25,000	29,500
5-9	84	31,690	7,127	26,650	31,454	35,000
10-14	48	34,361	7,412	29,004	35,000	37,000
15-19	33	40,460	10,963	36,500	39,800	44,100
20-24	21	43,059	13,056	34,882	42,000	47,160
25-29	17	43,797	11,367	34,500	41,344	53,600
Chem info services						
Total	50	44,066	13,310	33,500	40,000	52,000
Computers						
Total	44	44,467	13,740	33,700	43,500	53,850
Consulting						
Total	117	46,833	18,884	34,000	42,000	55,400
2-4	19	28,254	4,216	25,000	28,000	30,975
5-9	33	38,173	7,317	34,800	36,200	40,000
10-14	18	47,725	13,946	39,696	50,000	59,000

Table 2.2.2 (Continued)

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Other						
Total	202	41,649	16,101	31,000	38,860	48,000
2-4	30	29,257	4,172	26,000	28,300	32,700
5-9	35	34,480	8,013	28,500	33,000	39,600
10-14	44	37,769	9,882	31,367	37,816	43,460
15-19	20	47,867	16,769	38,350	42,600	50,500
25-29	17	49,718	23,327	33,000	50,000	56,000
30-34	22	52,552	14,430	42,000	51,842	65,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.3

SALARIES of BS CHEMISTS employed FULL-TIME
by INDUSTRY and YEARS SINCE BS
1990 ACS Salary Survey

TYPE OF INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Non-manufacturing						
Total	864	40,695	20,854	29,000	35,820	47,500
0-1	27	25,256	6,192	18,096	26,250	30,000
2-4	161	28,244	6,879	24,000	27,177	31,000
5-9	240	33,944	8,420	29,000	33,000	38,000
10-14	141	41,581	12,029	33,700	40,000	48,000
15-19	88	46,957	16,666	37,175	45,000	54,456
20-24	56	47,494	15,849	37,500	45,475	55,250
25-29	41	54,366	21,976	42,000	50,000	65,000
30-34	42	62,137	47,186	37,500	53,996	65,000
35-39	49	59,345	25,145	41,000	55,000	72,000
40 or more	19	72,823	46,254	46,000	60,500	92,000
Aerospace						
Total	135	48,554	19,124	36,000	43,700	56,264
5-9	27	37,602	6,592	32,300	37,752	42,000
10-14	26	42,309	12,910	34,560	39,000	48,000
15-19	17	52,039	18,162	42,000	45,000	54,000
30-34	18	53,529	13,688	44,400	55,000	61,500
Basic chemicals						
Total	215	49,737	20,696	35,000	45,300	60,000
2-4	25	29,418	4,093	27,300	30,000	32,500
5-9	27	35,638	6,210	32,000	34,700	39,300
10-14	33	42,679	7,447	36,500	42,180	50,000
15-19	20	49,009	24,248	37,285	43,100	53,400
20-24	31	56,383	11,259	48,000	56,820	65,000
25-29	29	60,078	14,118	50,400	58,080	70,000
30-34	15	65,549	20,078	52,956	60,000	72,000
35-39	19	70,128	26,496	50,000	68,120	80,400
Specialty chemicals						
Total	833	44,582	17,839	32,200	40,000	53,100
0-1	20	29,223	9,487	23,938	25,000	32,150
2-4	116	29,675	5,589	25,672	29,370	33,500
5-9	172	35,875	7,621	30,250	35,400	40,000
10-14	139	41,635	10,766	34,500	40,000	47,000
15-19	118	47,247	16,838	35,000	43,500	55,000
20-24	72	56,722	23,406	42,250	54,000	64,000
25-29	70	57,156	18,163	45,600	56,700	66,500
30-34	54	61,192	17,632	49,000	55,734	70,100
35-39	52	57,562	19,556	48,200	56,100	66,000
40 or more	20	59,721	19,489	46,000	60,650	75,000
Agricultural chemicals						
Total	172	41,154	15,214	30,000	37,500	48,000
2-4	26	28,021	5,443	25,000	28,290	30,000
5-9	36	32,022	5,327	28,510	31,985	35,000
10-14	28	37,956	7,818	32,665	38,650	43,750
15-19	20	45,122	9,807	37,550	42,300	50,300
20-24	17	51,446	10,567	45,000	49,512	56,460
30-34	17	58,899	17,912	45,000	61,000	72,000

Table 2.2.3 (Continued)

TYPE OF INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemical products						
Total	71	38,057	15,105	27,000	34,400	45,000
5-9	22	33,723	7,668	27,500	33,700	40,000
Coatings						
Total	361	45,023	26,886	33,500	40,500	51,780
2-4	47	30,008	6,209	26,338	29,900	34,000
5-9	77	36,175	6,303	32,000	35,600	40,000
10-14	57	40,504	6,953	37,000	41,000	45,000
15-19	43	47,007	13,392	39,000	47,000	53,000
20-24	23	55,267	15,686	45,000	53,800	64,000
25-29	35	49,969	13,294	40,500	48,000	60,000
30-34	27	58,605	15,427	45,000	55,000	67,495
35-39	28	57,722	13,678	46,300	57,550	66,125
Electronics						
Total	174	46,066	16,849	35,000	42,215	52,200
2-4	16	31,453	6,675	27,750	29,946	37,150
5-9	42	38,315	9,541	32,000	37,000	42,000
10-14	36	42,835	9,360	35,150	43,250	50,513
15-19	20	48,448	11,489	41,072	45,820	55,602
20-24	15	54,903	21,876	41,040	48,000	58,000
25-29	17	58,261	26,636	42,000	60,000	67,600
Food						
Total	250	42,664	19,824	30,420	38,925	48,000
2-4	27	27,991	4,644	24,500	27,000	31,500
5-9	55	32,655	6,798	28,500	32,000	37,500
10-14	71	39,566	9,474	33,500	39,000	46,420
15-19	32	47,615	12,443	39,000	44,580	54,500
Glass						
Total	52	39,713	12,523	30,250	37,650	47,800
Paper						
Total	67	44,160	16,077	34,000	42,000	52,920
10-14	15	44,870	10,720	40,000	42,777	51,000
Petroleum						
Total	226	48,447	18,271	36,000	43,750	57,000
2-4	22	31,153	4,278	28,800	30,860	34,000
5-9	43	38,383	8,238	33,000	38,098	40,300
10-14	47	45,589	10,215	38,000	45,000	51,300
15-19	35	51,386	13,870	40,000	46,200	58,000
20-24	26	59,838	17,533	49,000	54,875	77,600
25-29	18	65,461	17,053	52,600	65,060	79,000
Pharmaceuticals						
Total	973	41,037	15,161	31,500	37,600	46,400
0-1	41	28,374	3,681	26,100	28,200	30,860
2-4	185	30,229	4,291	28,000	30,000	32,600
5-9	241	34,458	6,006	31,000	34,450	38,000
10-14	186	41,985	9,819	36,000	40,100	45,000
15-19	107	46,075	10,956	40,000	45,000	50,000
20-24	64	50,909	13,554	42,130	48,000	59,000
25-29	61	55,370	14,811	48,000	55,000	60,000
30-34	49	63,070	30,436	50,000	56,800	65,000
35-39	26	59,443	17,188	49,000	58,320	67,000

Table 2.2.3 (Continued)

TYPE OF INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Plastics						
Total	251	47,746	19,047	33,000	43,560	59,000
2-4	19	29,454	4,554	26,500	29,100	32,650
5-9	54	35,816	8,532	30,000	32,850	42,000
10-14	42	41,231	14,481	34,000	39,250	48,000
15-19	26	52,029	15,416	41,500	47,900	67,500
20-24	24	53,229	14,341	40,000	51,920	64,900
25-29	24	58,651	19,649	49,000	57,800	71,150
30-34	19	60,517	14,637	49,000	59,800	70,000
35-39	25	64,768	22,045	49,500	60,500	72,000
Rubber						
Total	147	48,682	17,029	36,600	47,000	56,300
5-9	21	35,799	6,790	31,500	35,000	39,500
10-14	23	39,840	9,857	34,000	38,500	50,000
15-19	19	50,468	9,856	41,340	51,000	58,800
25-29	16	55,123	16,757	44,500	49,250	63,500
35-39	19	62,025	20,034	52,000	58,000	70,000
Soaps						
Total	92	43,569	18,187	32,700	39,000	50,050
2-4	20	32,522	3,618	31,950	33,150	34,500
5-9	19	37,543	12,389	30,000	39,000	45,000
10-14	19	40,789	9,984	31,000	41,000	49,000
Steel or ferrous metals						
Total	47	47,023	16,427	32,000	42,000	50,000
Other metals, minerals						
Total	111	43,554	16,629	32,400	40,000	50,500
5-9	15	33,514	4,631	30,300	32,000	37,187
10-14	26	40,462	11,751	32,000	36,374	46,000
15-19	16	44,051	9,573	37,391	42,000	50,000
Other manufactures						
Total	741	42,606	13,647	33,000	40,000	50,000
2-4	67	29,921	5,865	25,900	29,000	34,000
5-9	183	34,766	7,356	30,000	34,400	40,000
10-14	138	41,977	9,394	36,000	40,950	49,000
15-19	105	46,059	12,160	38,500	45,000	51,000
20-24	61	50,411	14,223	40,000	48,000	58,988
25-29	67	50,559	14,825	38,600	50,000	60,000
30-34	53	51,843	14,988	41,000	50,000	63,000
35-39	37	52,404	15,425	42,000	50,000	65,000
40 or more	22	54,998	17,646	41,496	54,980	66,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.4

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by GEOGRAPHIC REGION and YEARS SINCE BS
1990 ACS Salary Survey

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific						
Total	582	46,541	23,058	33,000	42,000	54,000
2-4	75	30,918	7,439	27,040	30,000	33,280
5-9	136	36,765	8,751	31,250	36,000	42,000
10-14	109	44,262	11,830	36,000	43,500	50,000
15-19	72	52,956	17,192	41,030	48,580	57,132
20-24	58	53,857	19,679	42,000	49,000	60,000
25-29	39	53,794	18,835	42,516	50,700	60,000
30-34	39	69,633	46,267	49,660	60,000	78,000
35-39	26	63,504	29,392	42,600	60,000	65,500
40 or more	15	76,087	49,337	46,500	56,400	96,000
Mountain						
Total	198	42,542	14,681	33,000	40,135	48,000
2-4	21	29,458	5,070	25,300	28,500	32,500
5-9	45	36,943	8,800	31,000	35,000	41,600
10-14	53	41,629	9,691	35,000	42,000	46,000
15-19	20	44,454	10,036	36,000	44,030	52,450
West North Central						
Total	427	38,995	13,824	30,000	36,100	44,100
2-4	76	27,764	4,993	24,075	27,950	30,800
5-9	96	33,898	6,619	29,350	33,000	37,876
10-14	82	37,984	8,934	32,880	38,000	42,500
15-19	56	44,983	14,094	35,860	42,000	49,485
20-24	31	47,489	11,547	39,000	47,300	55,200
25-29	28	48,816	16,256	37,053	48,000	53,050
30-34	27	49,944	17,070	38,000	45,000	60,000
West South Central						
Total	429	45,954	18,010	33,185	42,780	54,000
2-4	38	29,541	4,723	26,000	29,250	31,824
5-9	95	35,287	8,001	31,100	35,000	39,500
10-14	86	41,631	9,278	36,000	41,350	48,000
15-19	56	49,226	14,285	41,000	48,240	57,100
20-24	39	51,644	11,711	45,600	49,000	54,000
25-29	40	60,839	18,237	50,100	60,000	72,000
30-34	24	59,479	16,972	51,850	55,670	63,500
35-39	34	60,103	26,546	48,100	58,500	66,000
East North Central						
Total	1391	42,593	15,921	31,700	39,000	50,000
0-1	37	25,631	4,751	22,900	26,000	28,100
2-4	189	29,358	4,986	26,000	28,900	33,000
5-9	329	34,634	7,270	30,000	34,000	38,500
10-14	232	41,488	9,191	35,500	40,000	47,000
15-19	170	46,367	13,228	38,376	44,070	51,000
20-24	121	52,824	20,264	40,000	50,000	60,000
25-29	115	52,994	16,587	42,000	52,000	62,000
30-34	80	56,937	16,347	44,150	55,000	67,250
35-39	76	56,860	19,387	45,725	56,000	65,000
40 or more	42	59,160	18,894	45,900	55,200	73,000

Table 2.2.4 (Continued)

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
East South Central						
Total	231	40,469	13,331	31,040	37,000	48,000
2-4	27	29,369	6,232	24,750	28,600	34,650
5-9	48	32,954	5,743	30,000	33,750	37,000
10-14	49	40,142	10,203	34,000	37,500	47,300
15-19	33	41,023	11,075	33,000	40,280	46,000
20-24	17	50,746	12,345	42,400	50,000	55,000
25-29	21	48,680	17,076	38,000	48,500	60,000
30-34	15	56,455	15,520	48,000	51,120	60,200
Middle Atlantic						
Total	1297	44,374	18,390	32,000	40,000	52,000
0-1	44	28,171	3,461	25,266	28,450	30,430
2-4	200	30,226	5,508	27,400	30,000	33,450
5-9	274	35,448	7,388	31,000	35,000	40,000
10-14	216	42,245	11,546	35,000	40,550	48,000
15-19	150	48,049	15,782	39,700	45,000	55,000
20-24	90	54,020	16,790	43,000	51,800	64,000
25-29	108	56,752	19,035	44,500	55,000	67,000
30-34	96	61,202	25,809	47,140	56,000	70,090
35-39	80	61,423	23,709	47,500	56,250	69,500
40 or more	39	62,637	19,674	48,880	60,000	70,000
South Atlantic						
Total	763	43,612	17,232	31,500	40,000	52,000
0-1	16	28,231	7,502	22,850	27,450	33,200
2-4	89	28,513	5,527	24,500	27,500	32,000
5-9	180	33,667	7,473	28,341	34,000	38,000
10-14	150	41,231	9,673	34,600	40,000	48,000
15-19	85	47,105	12,132	39,600	46,000	55,000
20-24	70	53,598	15,278	43,000	50,500	63,000
25-29	54	60,678	21,360	46,000	58,740	71,000
30-34	53	58,200	17,880	47,000	55,000	70,000
35-39	42	60,213	20,493	45,660	61,000	67,000
40 or more	24	58,156	27,895	38,000	53,500	68,500
New England						
Total	405	44,659	30,636	31,500	39,000	51,000
2-4	67	29,755	4,515	26,400	30,000	32,000
5-9	94	35,553	6,943	30,600	35,000	39,000
10-14	67	41,047	10,539	33,000	40,000	46,000
15-19	53	46,865	12,734	38,300	45,000	55,000
20-24	21	55,394	17,968	44,500	57,600	65,000
25-29	23	51,478	17,750	40,500	49,000	62,000
30-34	21	56,726	11,576	50,500	58,200	62,500
35-39	32	73,542	53,619	50,500	59,000	79,609

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.5

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by SELECTED STATES and YEARS SINCE BS
1990 ACS Salary Survey

SELECTED STATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Alabama						
Total	39	40,758	11,183	33,000	37,000	48,600
Arizona						
Total	41	44,108	16,888	32,000	40,500	48,000
Arkansas						
Total	23	38,117	17,627	26,500	33,000	45,000
California						
Total	497	47,134	20,589	34,070	43,000	54,400
2-4	63	31,450	7,825	27,500	31,000	34,000
5-9	116	37,798	8,562	32,000	37,450	42,775
10-14	93	45,531	11,519	39,000	44,000	50,000
15-19	62	54,184	17,476	43,000	50,142	58,300
20-24	46	55,900	20,198	44,000	50,000	62,300
25-29	32	54,726	20,367	42,258	51,650	60,693
30-34	37	62,997	20,005	49,660	60,000	72,000
35-39	22	62,732	31,903	42,000	55,500	63,600
Colorado						
Total	87	42,121	16,026	32,700	39,000	48,000
5-9	22	37,153	10,166	31,500	34,900	40,300
10-14	23	41,274	11,923	34,000	41,000	45,000
Connecticut						
Total	152	49,042	39,256	31,703	41,100	57,850
2-4	30	29,520	4,491	26,400	29,030	32,000
5-9	23	36,918	8,852	30,120	36,000	40,000
10-14	19	42,431	12,993	33,000	38,300	51,200
15-19	18	51,656	14,603	42,000	54,250	61,000
35-39	16	66,900	20,545	50,500	62,028	81,609
Delaware						
Total	74	49,125	14,304	39,000	44,700	58,500
5-9	15	39,673	6,228	37,000	38,000	42,000
10-14	19	41,891	5,839	36,000	43,000	45,000
Total	86	44,045	15,981	32,500	41,550	54,000
Florida						
Total	98	41,050	17,567	29,500	36,550	48,000
5-9	27	31,940	10,053	26,800	32,000	36,000
10-14	16	41,263	11,316	34,130	40,000	46,586
Georgia						
Total	119	43,664	18,754	30,500	38,500	52,000
2-4	15	26,091	4,647	23,000	24,800	26,160
5-9	29	34,471	7,888	28,500	35,000	39,000
10-14	21	38,614	7,496	34,980	37,000	43,152
15-19	21	50,201	14,032	40,500	50,000	56,000

Table 2.2.5 (Continued)

SELECTED STATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Illinois						
Total	395	43,276	18,734	31,000	39,000	50,000
2-4	60	30,059	5,163	27,000	28,850	33,350
5-9	88	34,915	7,706	30,000	34,000	39,000
10-14	59	41,671	8,227	36,300	40,000	47,900
15-19	44	45,150	13,296	36,000	41,250	50,500
20-24	37	55,096	29,587	43,000	48,000	58,000
25-29	39	52,763	16,992	39,000	54,000	63,000
30-34	24	60,689	19,973	42,700	58,500	75,150
35-39	19	54,435	28,103	37,350	55,000	68,000
Indiana						
Total	178	42,500	14,998	32,000	38,600	51,000
2-4	25	29,706	4,938	26,000	29,500	32,500
5-9	34	32,705	7,409	28,000	30,640	37,200
10-14	25	42,374	14,207	34,000	37,000	46,300
15-19	24	48,666	18,487	36,150	44,520	51,000
20-24	22	48,912	11,921	38,000	49,000	58,000
35-39	15	58,055	12,165	49,000	57,240	65,000
Iowa						
Total	55	36,272	11,223	28,380	33,500	42,500
Kansas						
Total	69	35,733	12,056	27,300	33,000	39,000
2-4	16	27,647	4,030	23,825	28,602	31,400
5-9	20	33,650	6,746	28,950	35,000	37,500
Kentucky						
Total	83	40,475	13,538	31,000	37,500	49,000
5-9	16	33,581	5,746	29,900	34,250	37,950
10-14	20	38,768	12,872	31,050	36,000	46,400
Louisiana						
Total	68	48,162	19,984	35,776	47,450	54,620
10-14	16	44,875	7,403	39,250	43,890	48,670
Massachusetts						
Total	178	43,128	26,965	32,000	37,876	48,400
2-4	28	30,545	4,518	26,850	31,278	33,000
5-9	54	34,950	5,709	30,992	34,400	39,000
10-14	30	42,734	10,284	36,000	42,250	50,000
15-19	23	46,585	12,101	37,752	45,000	54,000
Michigan						
Total	290	41,864	13,497	33,000	39,825	48,000
2-4	47	30,711	4,227	29,000	30,240	33,500
5-9	79	36,167	7,958	30,200	35,000	41,000
10-14	67	41,343	8,338	36,900	40,000	46,500
15-19	33	46,183	11,756	41,000	44,000	50,000
20-24	19	57,361	15,587	48,000	57,000	60,720
Minnesota						
Total	107	42,382	16,576	30,000	38,000	50,000
2-4	16	29,147	5,559	26,000	29,250	33,850
5-9	20	31,839	6,536	27,050	30,550	37,200
10-14	28	40,157	10,005	35,250	38,300	46,000
Mississippi						
Total	20	36,423	6,826	31,120	34,500	41,100

Table 2.2.5 (Continued)

SELECTED STATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Missouri						
Total	161	39,421	13,231	30,900	36,600	45,000
2-4	28	28,816	4,838	27,266	28,350	30,500
5-9	37	34,237	6,864	30,000	32,600	37,000
10-14	33	38,237	7,906	32,880	38,000	43,200
15-19	17	42,576	8,827	36,000	40,000	47,000
Nebraska						
Total	27	35,847	13,142	25,000	34,000	40,000
New Jersey						
Total	527	46,341	20,648	33,000	41,000	55,000
0-1	21	28,094	2,840	25,000	28,500	30,000
2-4	84	31,306	5,382	28,000	31,156	34,050
5-9	118	36,701	6,505	32,400	36,160	40,000
10-14	86	44,904	12,579	37,300	42,000	50,000
15-19	54	53,045	18,911	41,170	51,060	60,000
20-24	36	57,418	20,238	45,000	55,500	65,500
25-29	43	61,925	24,347	48,000	57,500	71,196
30-34	37	64,465	35,231	49,500	56,400	69,500
35-39	33	63,997	22,979	49,000	59,400	75,000
40 or more	15	61,221	15,481	55,000	60,000	70,000
New York						
Total	336	44,466	18,393	31,863	40,800	51,550
2-4	43	29,376	5,202	26,000	29,000	32,000
5-9	84	34,630	7,928	28,030	34,800	40,000
10-14	54	41,239	10,932	35,000	41,000	46,548
15-19	41	47,262	12,107	40,200	46,000	55,900
20-24	21	53,276	14,130	43,000	52,000	67,000
25-29	27	54,768	13,243	42,000	57,000	65,500
30-34	23	62,198	19,567	49,500	55,000	80,000
35-39	21	66,886	30,101	48,000	55,000	74,500
North Carolina						
Total	188	42,762	17,749	31,000	37,685	50,000
2-4	32	29,646	6,075	26,642	28,300	31,800
5-9	44	32,424	5,894	27,000	32,000	37,175
10-14	33	40,273	8,763	36,000	38,016	45,700
15-19	18	46,441	10,913	38,000	46,100	54,264
20-24	18	55,135	19,722	38,500	53,650	63,800
25-29	16	55,513	17,204	45,750	53,900	68,250
Ohio						
Total	387	43,383	15,982	31,200	40,000	52,000
2-4	40	27,446	4,773	25,000	26,369	29,650
5-9	91	33,651	5,762	30,200	33,000	38,000
10-14	60	40,917	8,135	34,000	40,725	47,400
15-19	43	47,984	13,107	38,000	47,000	56,700
20-24	28	52,874	16,061	39,600	53,000	63,750
25-29	38	51,354	16,809	41,600	49,500	60,000
30-34	22	56,598	18,980	42,500	53,333	70,260
35-39	36	58,687	17,129	45,725	56,050	65,890
Oklahoma						
Total	32	49,898	25,603	34,000	49,240	59,000

Table 2.2.5 (Continued)

SELECTED STATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Oregon						
Total	22	39,344	13,301	30,600	39,400	42,430
Pennsylvania						
Total	434	41,913	14,891	31,230	39,474	50,000
2-4	73	29,482	5,685	25,922	30,000	33,500
5-9	72	34,350	7,877	29,950	34,000	40,000
10-14	76	39,950	10,209	33,250	38,080	44,925
15-19	55	43,731	13,537	36,000	43,440	49,500
20-24	33	50,787	13,679	43,000	49,000	56,300
25-29	38	52,307	14,049	41,600	50,200	59,900
30-34	36	57,214	16,200	44,000	55,650	63,200
35-39	26	53,744	16,745	46,500	56,000	65,000
Rhode Island						
Total	24	40,497	12,260	31,000	36,000	49,625
South Carolina						
Total	59	45,097	19,785	31,000	42,000	52,500
5-9	18	33,289	6,418	29,000	31,750	35,820
Tennessee						
Total	89	41,246	15,009	31,000	39,000	48,500
5-9	16	31,213	6,495	26,050	31,850	36,500
10-14	16	44,965	7,636	36,122	47,150	49,498
Texas						
Total	306	45,641	16,460	33,722	42,050	53,400
2-4	23	29,186	5,058	25,920	29,100	31,000
5-9	68	35,403	8,110	31,254	35,000	40,128
10-14	60	41,031	9,454	35,600	40,100	47,720
15-19	43	49,724	14,838	40,000	48,000	58,000
20-24	30	51,731	12,727	45,000	49,700	52,000
25-29	30	62,957	19,378	50,000	64,735	74,000
30-34	17	57,529	15,796	51,700	54,000	63,000
35-39	25	56,329	21,271	42,000	56,000	66,000
Utah						
Total	25	41,556	9,443	34,000	42,800	46,000
Virginia						
Total	98	43,402	16,208	32,000	40,000	55,000
5-9	22	34,817	6,961	30,000	34,000	39,936
10-14	23	41,950	12,120	33,584	41,000	50,500
Washington						
Total	55	43,684	40,833	28,500	35,000	46,740
West Virginia						
Total	30	39,112	12,857	30,400	36,015	43,000
Wisconsin						
Total	141	40,125	12,410	31,600	38,916	48,000
2-4	17	27,135	5,340	23,740	25,900	29,200
5-9	37	34,883	7,491	30,000	35,000	37,776
10-14	21	42,016	10,494	35,500	40,000	48,000
15-19	26	43,864	8,953	39,500	45,000	49,000
20-24	15	47,117	12,039	39,400	46,800	55,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.6

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by SELECTED METROPOLITAN AREAS and YEARS SINCE BS
1990 ACS Salary Survey

METROPOLITAN AREAS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Atlanta						
Total	77	45,095	21,081	31,400	38,500	52,000
5-9	20	34,117	7,576	28,572	34,550	39,500
Baltimore						
Total	58	43,726	14,638	30,900	42,500	54,700
10-14	17	47,160	11,626	42,000	49,700	54,000
Boston						
Total	128	43,768	30,335	32,000	36,875	48,950
2-4	21	30,581	4,219	27,100	31,556	33,000
5-9	44	34,854	5,948	30,796	34,250	39,000
10-14	23	45,279	9,692	36,300	45,000	52,000
15-19	16	49,119	13,164	37,400	47,700	57,400
Chicago						
Total	352	43,101	17,071	31,621	39,000	50,000
2-4	53	30,058	4,346	27,000	29,400	33,500
5-9	80	34,621	6,525	30,000	34,000	39,000
10-14	52	42,337	8,658	36,650	42,630	49,130
15-19	39	46,029	14,065	36,000	42,000	51,000
20-24	30	54,351	15,963	44,000	49,500	60,000
25-29	32	52,259	16,711	38,000	52,200	62,500
30-34	21	61,515	20,055	44,300	62,000	74,300
35-39	20	51,464	26,685	37,675	49,850	61,544
Cincinnati						
Total	78	42,073	14,519	30,480	39,800	50,000
5-9	20	34,025	4,556	30,450	33,500	37,925
Cleveland-Akron						
Total	79	48,578	18,116	34,000	47,160	60,000
Columbus						
Total	55	45,833	17,528	33,250	42,200	54,000
5-9	17	34,863	5,527	31,200	33,250	37,000
Dallas						
Total	70	41,215	15,294	30,000	39,000	49,500
5-9	18	31,684	6,108	26,100	31,800	35,500
Dayton						
Total	26	37,048	11,432	28,425	36,000	43,000
Denver						
Total	42	42,341	19,551	30,600	37,100	46,800
Detroit						
Total	100	41,704	13,543	31,750	40,000	50,127
2-4	18	31,196	5,335	27,000	31,250	34,800
5-9	31	37,925	10,222	30,000	37,800	43,920
10-14	22	40,425	8,425	36,000	39,058	47,000
Houston-Beaumont						
Total	145	50,108	17,641	37,900	48,000	58,500
5-9	24	35,673	7,882	29,190	35,500	41,300
10-14	27	43,675	8,695	37,550	44,000	51,000
15-19	25	53,805	13,452	46,200	52,055	58,500
25-29	16	66,843	21,890	53,000	71,000	79,700
35-39	17	61,660	20,416	48,100	60,000	70,000

Table 2.2.6 (Continued)

METROPOLITAN AREAS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Los Angeles						
Total	164	50,558	26,290	34,000	44,050	57,750
2-4	21	31,099	3,182	29,000	31,200	32,000
5-9	34	37,168	8,740	31,000	36,580	41,000
10-14	30	45,264	14,207	37,500	44,256	50,000
30-34	20	68,593	21,486	53,700	66,000	80,000
Miami						
Total	20	38,025	16,697	28,401	36,000	43,000
Newark						
Total	257	46,576	21,592	33,000	42,000	55,000
2-4	46	31,193	5,496	28,000	31,275	34,500
5-9	49	37,385	6,138	33,000	37,008	41,000
10-14	34	47,673	11,981	39,700	44,500	55,000
15-19	23	49,947	11,298	42,000	51,000	57,000
20-24	19	60,061	25,215	45,000	55,000	66,000
25-29	22	55,714	15,982	46,000	56,050	67,000
30-34	19	64,032	46,317	45,000	50,000	70,000
35-39	22	62,495	24,401	47,000	56,500	75,000
New York						
Total	49	46,773	25,710	31,380	40,000	48,000
Philadelphia						
Total	193	43,647	15,311	32,100	40,000	52,000
2-4	35	31,955	4,958	29,400	31,600	34,250
5-9	36	36,222	7,018	31,300	35,200	40,000
10-14	28	43,884	11,744	34,400	38,700	53,500
15-19	23	49,680	14,282	41,850	46,500	50,000
30-34	15	66,543	16,556	55,000	62,000	72,500
Pittsburgh						
Total	90	44,890	15,906	33,700	41,000	55,000
2-4	15	27,497	6,273	22,080	30,000	33,000
25-29	16	58,878	14,550	49,200	57,114	72,000
St. Louis						
Total	116	39,566	12,290	31,100	36,500	44,550
2-4	19	29,403	4,479	27,531	28,800	34,000
5-9	30	35,022	7,068	30,775	33,250	38,000
10-14	19	39,124	8,263	33,020	42,000	44,000
15-19	15	42,080	8,855	36,000	39,000	48,000
San Francisco						
Total	223	47,113	16,493	36,000	44,000	54,400
2-4	23	33,518	10,959	28,000	31,900	34,400
5-9	54	39,575	8,617	33,600	39,950	44,000
10-14	46	45,680	10,431	40,000	44,000	50,000
15-19	33	55,234	16,283	45,000	51,000	66,000
20-24	25	54,919	13,225	45,000	50,000	60,000
25-29	15	51,890	13,111	42,516	54,000	60,000
Washington, DC						
Total	49	43,929	17,930	30,975	41,500	50,000
5-9	15	36,474	7,675	30,000	34,800	40,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.7

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by SUPERVISORY STATUS and YEARS SINCE BS
1990 ACS Salary Survey

SUPERVISORY STATUS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Non-supervisors						
Total	3208	37,353	11,453	29,500	35,000	43,000
0-1	139	27,079	5,753	24,000	27,000	30,000
2-4	621	28,940	4,770	25,900	28,800	32,000
5-9	873	33,774	6,616	29,500	33,500	38,000
10-14	549	38,220	8,374	33,000	37,500	43,700
15-19	316	41,427	9,590	35,000	40,700	46,960
20-24	186	45,450	11,216	37,200	45,000	52,300
25-29	183	48,028	13,729	39,850	47,500	55,700
30-34	153	49,737	13,310	40,000	49,500	59,000
35-39	128	51,054	13,607	42,000	50,000	60,520
40 or more	60	52,464	17,802	40,250	53,014	60,750
Supervisors						
Total	2318	52,057	23,341	38,700	48,000	60,000
2-4	139	32,421	7,449	27,300	32,000	36,000
5-9	375	37,751	8,704	32,000	37,000	42,000
10-14	467	45,737	10,906	38,500	44,800	51,300
15-19	360	52,238	15,712	42,000	49,700	60,000
20-24	267	57,818	19,084	46,000	54,000	67,000
25-29	233	60,686	19,872	48,000	58,000	70,000
30-34	197	66,337	28,496	51,700	61,880	75,000
35-39	179	68,524	32,581	51,600	62,000	75,000
40 or more	89	73,755	51,553	52,000	63,000	84,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.2.8

SALARIES of BS CHEMISTS employed FULL-TIME
by TOTAL SUBORDINATES and YEARS SINCE BS
1990 ACS Salary Survey

TOTAL SUBORDINATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
None						
Total	2336	37,434	15,131	28,896	34,720	42,600
0-1	116	27,047	5,923	24,000	27,000	29,768
2-4	490	28,636	4,754	25,452	28,580	31,644
5-9	621	33,600	6,600	29,300	33,000	38,000
10-14	377	37,815	8,936	32,200	37,000	43,500
15-19	215	42,409	9,642	36,000	42,000	48,000
20-24	132	45,257	12,094	37,000	44,335	51,200
25-29	128	48,202	15,642	37,050	46,510	58,040
30-34	116	52,382	29,065	40,000	49,250	59,500
35-39	98	54,826	34,015	40,900	50,500	63,000
40 or more	43	56,823	23,585	44,000	55,000	62,300
1-2						
Total	1177	42,149	13,117	32,700	40,000	50,000
2-4	140	30,631	5,317	26,500	30,000	34,000
5-9	274	34,908	7,007	30,000	34,550	39,000
10-14	230	40,567	8,667	35,500	39,000	46,000
15-19	140	44,844	12,015	36,330	43,317	51,000
20-24	93	50,269	11,945	42,000	48,000	55,000
25-29	96	49,758	12,569	41,200	49,340	57,550
30-34	75	53,189	13,071	44,000	51,300	62,000
35-39	64	52,879	13,835	43,500	54,055	61,780
40 or more	51	57,535	18,382	44,000	55,000	68,000
3-9						
Total	1380	46,379	19,702	35,000	43,000	54,000
0-1	20	27,702	4,485	24,500	26,800	31,404
2-4	115	30,727	7,207	26,500	30,000	34,000
5-9	284	36,312	8,266	30,950	35,600	40,350
10-14	279	43,879	10,230	37,400	42,900	49,900
15-19	203	48,099	11,815	40,000	46,500	55,000
20-24	141	53,546	15,732	44,600	51,800	60,000
25-29	128	55,232	16,035	42,250	54,700	64,350
30-34	91	58,042	15,594	47,800	55,467	65,000
35-39	88	60,417	22,117	49,000	56,350	64,900
40 or more	31	76,692	77,214	45,000	56,400	75,000
10-14						
Total	313	50,075	16,863	37,700	47,500	61,000
2-4	18	31,222	7,152	26,900	31,000	35,000
5-9	60	37,615	9,679	31,750	35,726	40,100
10-14	60	47,783	11,991	39,500	45,500	55,000
15-19	52	48,401	14,077	39,350	46,150	58,000
20-24	34	55,700	14,732	45,000	56,250	63,500
25-29	27	60,714	16,707	48,500	60,000	67,600
30-34	24	65,795	13,796	55,800	63,750	74,910
35-39	24	63,846	12,983	55,500	63,500	70,250

Table 2.2.8 (Continued)

TOTAL SUBORDINATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
15-29						
Total	323	56,419	20,588	42,000	53,200	67,000
2-4	15	33,650	7,534	28,500	33,722	36,000
5-9	36	38,777	9,541	32,700	36,500	42,900
10-14	66	47,039	10,715	40,000	48,025	53,052
15-19	54	55,514	19,622	44,100	51,300	63,000
20-24	35	63,959	27,043	50,880	60,000	72,000
25-29	35	65,827	10,634	58,000	67,000	72,500
30-34	38	67,642	19,472	54,000	65,400	80,000
35-39	29	71,688	20,210	57,000	65,000	80,200
30-49						
Total	109	61,399	26,378	44,000	57,000	76,325
10-14	25	49,232	12,748	42,900	45,200	57,000
15-19	19	58,389	21,306	44,000	57,000	69,700
20-24	19	71,364	16,402	56,500	73,000	80,000
50-99						
Total	94	70,129	33,563	46,300	61,441	90,460
10-14	16	44,725	8,242	39,500	42,150	50,400
30-34	15	88,302	47,140	60,000	90,000	96,000
100 or more						
Total	50	73,798	32,726	47,000	70,808	95,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.1

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY
by WORK SPECIALTY and YEARS SINCE BS
1990 ACS Salary Survey

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemistry						
Total	79	46,740	24,282	35,000	42,000	51,876
10-14	19	39,512	8,072	33,000	38,500	43,200
Biotechnology						
Total	89	48,460	16,421	38,000	44,000	52,000
5-9	17	38,234	6,985	35,000	38,000	42,000
10-14	32	44,967	13,188	37,305	43,275	46,000
15-19	18	46,651	10,887	40,000	43,956	50,500
General chemistry						
Total	104	49,428	14,720	39,600	47,500	55,000
10-14	20	45,257	5,749	40,300	44,825	50,000
15-19	19	43,597	9,303	36,000	41,000	50,000
25-29	18	52,289	10,186	45,416	53,500	57,500
Agricultural chemistry						
Total	134	52,215	17,540	40,000	48,000	62,000
5-9	15	36,358	7,054	30,000	36,200	40,000
10-14	21	46,024	10,960	39,000	43,500	49,900
15-19	30	47,706	12,462	39,000	45,900	55,272
20-24	22	53,386	17,961	40,200	53,600	58,500
Analytical chemistry						
Total	947	46,886	15,367	37,097	44,124	53,000
2-4	22	29,952	4,881	26,940	30,400	33,000
5-9	148	35,294	6,248	31,400	35,000	39,050
10-14	216	43,047	9,228	37,500	42,300	47,400
15-19	175	47,447	10,509	40,000	46,000	54,000
20-24	143	53,189	22,718	42,000	50,000	60,105
25-29	92	50,868	13,362	40,900	51,000	58,948
30-34	64	55,431	16,144	44,000	53,998	63,520
35-39	62	57,655	15,059	47,000	56,216	67,000
40 or more	25	60,379	16,911	49,380	60,060	64,800
Clinical chemistry						
Total	27	54,341	15,366	46,200	52,700	66,800
Environmental chemistry						
Total	324	47,622	16,991	36,000	45,000	55,000
5-9	71	38,334	8,644	32,000	38,000	44,000
10-14	73	44,566	11,311	36,000	43,500	50,000
15-19	64	47,097	11,148	39,145	48,000	54,902
20-24	50	52,936	17,692	44,400	50,000	60,300
25-29	16	58,573	17,945	43,500	54,750	74,500
30-34	15	55,106	18,135	39,000	53,000	73,000

Table 2.3.1 (Continued)

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Inorganic chemistry						
Total	65	52,499	14,986	41,000	50,880	60,000
Materials science						
Total	205	53,974	18,918	42,000	50,640	60,000
5-9	28	40,155	5,929	35,710	40,500	45,000
10-14	40	47,348	10,906	39,500	45,250	55,000
15-19	41	51,163	13,724	44,000	50,640	56,000
20-24	19	61,045	15,989	51,000	58,000	70,400
25-29	24	56,052	18,302	45,500	51,200	68,500
30-34	24	66,288	19,522	55,500	62,000	69,268
35-39	18	65,546	15,735	52,280	67,250	73,776
Medicinal/Pharmaceutical						
Total	273	47,007	14,249	36,500	43,000	53,000
5-9	71	36,744	5,778	33,400	36,000	39,000
10-14	53	43,877	9,822	38,000	42,000	48,372
15-19	46	49,533	11,770	42,500	47,770	53,260
20-24	33	54,716	16,383	43,000	50,500	60,000
25-29	28	58,050	11,621	47,000	55,625	66,100
Organic chemistry						
Total	423	49,776	15,058	39,000	46,000	56,600
5-9	68	36,766	4,369	33,695	36,100	39,000
10-14	68	42,298	9,486	37,150	40,250	45,170
15-19	76	49,693	11,818	41,152	47,050	55,900
20-24	55	54,460	11,312	45,000	52,000	60,216
25-29	48	56,879	14,103	48,000	53,250	64,000
30-34	28	56,752	12,161	45,835	57,175	65,000
35-39	39	58,524	14,681	49,000	54,000	68,000
40 or more	27	68,068	22,630	50,400	63,000	87,516
Physical chemistry						
Total	70	55,276	19,991	40,000	51,310	66,000
10-14	16	46,129	8,882	38,593	44,750	56,150
Polymer chemistry						
Total	493	52,324	17,461	41,000	50,000	60,000
5-9	86	38,006	7,094	33,500	37,000	41,100
10-14	95	47,547	9,544	40,000	47,000	52,500
15-19	74	53,173	12,360	45,000	50,850	59,500
20-24	62	54,084	12,831	45,000	55,000	64,000
25-29	54	60,627	16,422	51,000	59,400	69,500
30-34	34	62,012	13,615	56,436	59,868	65,000
35-39	49	65,520	27,310	48,472	61,000	72,500
40 or more	27	63,441	25,523	52,000	60,000	68,820
Other chemical science						
Total	111	51,713	15,172	40,000	50,700	60,000
10-14	23	46,441	7,670	39,200	45,000	52,400
15-19	17	52,062	6,442	46,500	52,500	56,000
20-24	16	54,216	12,738	43,450	56,250	66,127

Table 2.3.1 (Continued)

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Business Administration						
Total	123	69,357	37,147	52,000	63,000	77,000
10-14	17	51,409	14,561	41,600	48,700	52,000
15-19	19	65,639	17,132	53,000	66,000	77,000
20-24	27	71,177	21,897	54,000	68,400	80,000
25-29	22	65,021	24,561	52,000	58,750	79,000
30-34	19	74,474	23,241	60,000	70,000	77,000
Other non-chem						
Total	160	58,178	17,294	45,000	55,000	65,870
10-14	18	46,271	6,818	42,170	45,600	52,000
15-19	31	51,615	11,997	44,000	49,500	58,320
20-24	33	57,237	13,546	49,000	55,000	64,720
25-29	31	65,741	20,637	51,240	62,500	80,000
30-34	15	71,854	20,848	58,370	70,000	80,500

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.2

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY
by WORK FUNCTION and YEARS SINCE BS
1990 ACS Salary Survey

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
R&D Mgt						
Total	418	62,563	19,605	51,600	60,000	71,000
5-9	19	40,120	9,188	33,000	35,177	46,200
10-14	70	52,806	10,889	45,000	52,000	57,200
15-19	86	58,617	13,461	50,300	55,478	67,000
20-24	67	62,316	13,594	55,000	64,200	69,500
25-29	59	68,306	17,270	55,000	66,000	75,000
30-34	51	70,588	18,432	56,436	68,536	83,000
35-39	38	80,265	31,127	65,000	75,000	81,000
40 or more	25	67,839	24,883	60,000	64,000	72,800
Basic research						
Total	303	43,724	12,050	35,500	42,000	50,000
2-4	17	35,056	2,979	33,000	34,000	36,000
5-9	88	35,721	5,095	32,250	36,000	38,900
10-14	69	39,978	6,865	35,125	40,000	44,000
15-19	48	46,306	6,446	42,000	45,350	52,000
20-24	30	51,854	9,025	48,000	51,500	58,700
25-29	23	51,453	7,234	45,000	51,960	56,000
Applied research						
Total	1280	47,207	13,172	38,000	45,000	54,000
2-4	34	33,205	4,302	31,000	33,450	35,000
5-9	255	37,118	5,902	33,800	36,500	40,000
10-14	274	42,847	7,440	38,000	42,400	47,200
15-19	224	47,969	9,549	42,000	47,500	54,000
20-24	137	50,312	9,968	42,845	49,075	56,000
25-29	125	54,595	13,411	46,000	52,700	62,000
30-34	96	56,818	12,660	48,550	57,199	63,530
35-39	80	59,814	18,129	48,536	55,000	67,050
40 or more	55	61,630	19,657	50,400	60,060	68,820
General Mgt						
Total	262	65,671	34,644	46,000	58,167	78,000
5-9	22	40,805	9,781	32,600	39,134	49,000
10-14	43	51,478	15,814	40,200	45,600	58,000
15-19	46	54,218	15,642	42,500	53,250	63,000
20-24	49	77,391	36,228	55,000	70,000	88,000
25-29	37	66,265	23,861	51,350	60,866	74,700
30-34	27	75,757	26,089	55,000	72,000	100,000
35-39	16	77,151	21,225	60,000	74,650	86,000
40 or more	21	97,892	76,841	54,000	85,000	105,000
Marketing						
Total	273	53,278	14,564	42,200	52,000	61,000
5-9	31	39,668	7,618	35,000	38,500	45,000
10-14	62	48,395	12,460	40,000	46,000	54,000
15-19	40	53,889	13,324	43,070	54,500	62,500
20-24	47	55,134	11,635	45,200	56,100	62,000
25-29	33	59,997	15,894	49,800	57,000	69,000
30-34	22	59,676	10,159	52,000	58,185	70,000
35-39	20	60,705	16,529	44,500	55,500	74,575
40 or more	17	60,553	18,748	50,400	60,000	70,000

Table 2.3.2 (Continued)

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Production						
Total	431	44,784	14,134	35,200	42,500	50,000
2-4	19	30,828	4,584	28,000	32,000	33,700
5-9	62	34,795	5,711	30,500	34,750	39,600
10-14	84	42,117	9,213	36,650	42,000	47,450
15-19	79	43,782	9,878	37,097	42,500	48,000
20-24	77	50,063	16,731	39,300	48,000	60,105
25-29	40	52,661	14,590	42,150	51,100	59,200
30-34	30	54,620	21,822	42,000	51,900	60,400
35-39	29	49,712	12,878	43,000	46,500	55,000
Health & Safety						
Total	181	52,617	16,207	42,000	49,500	61,000
5-9	23	40,514	6,196	35,000	40,469	45,000
10-14	29	45,005	8,345	38,000	44,000	49,320
15-19	31	50,578	10,127	45,000	49,500	55,100
20-24	36	54,561	12,880	47,000	50,000	63,620
25-29	18	56,410	19,955	41,000	55,250	66,200
35-39	20	62,339	13,741	53,250	60,500	66,750
Forensics						
Total	115	41,176	12,245	33,000	40,000	50,000
5-9	24	31,233	6,703	27,100	32,250	35,000
10-14	16	38,661	8,310	33,250	39,500	43,500
15-19	30	41,413	9,898	35,000	41,900	45,000
20-24	20	43,938	12,961	33,500	44,850	52,000
Chem info services						
Total	89	49,354	11,538	41,000	47,000	56,500
15-19	17	47,503	8,250	41,304	46,000	52,000
25-29	19	50,877	12,303	44,000	46,000	57,000
Computers						
Total	35	49,013	11,485	40,000	50,000	53,000
Consulting						
Total	101	47,515	15,419	36,500	45,000	54,000
5-9	30	39,193	7,388	35,000	38,000	42,000
10-14	31	46,637	9,204	37,500	46,500	53,000
Other						
Total	105	51,764	15,086	40,000	49,500	61,500
10-14	21	44,714	9,056	38,000	43,500	48,600
15-19	16	50,018	11,243	40,583	50,230	58,010
20-24	17	55,332	18,299	46,000	52,400	58,000
25-29	18	61,487	13,834	54,000	60,500	70,800

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.3

SALARIES of MS CHEMISTS employed FULL-TIME
by INDUSTRY and YEARS SINCE BS
1990 ACS Salary Survey

TYPE OF INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Non-manufacturing						
Total	460	49,062	24,103	36,000	45,000	56,000
5-9	96	36,983	8,854	30,882	36,100	41,000
10-14	106	44,858	11,640	36,500	43,650	50,000
15-19	73	49,209	15,252	39,000	48,000	57,000
20-24	63	58,327	19,799	48,000	53,000	67,254
25-29	39	53,394	19,970	40,000	51,350	65,000
30-34	30	56,555	22,117	40,000	51,500	68,600
35-39	23	61,650	17,060	47,340	57,960	71,000
40 or more	19	77,064	82,296	45,000	58,000	87,516
Aerospace						
Total	102	52,521	14,947	41,000	48,930	61,000
5-9	16	39,547	3,756	36,320	39,980	42,038
10-14	26	45,639	8,456	39,186	44,000	52,050
25-29	15	62,101	15,744	47,000	62,500	67,000
Basic chemicals						
Total	176	52,112	16,022	40,780	49,400	60,530
5-9	26	35,678	5,226	31,800	34,690	40,063
10-14	25	46,698	10,202	41,000	44,500	49,000
15-19	23	50,745	14,601	40,000	50,000	55,110
20-24	28	57,244	10,879	49,200	54,000	66,750
25-29	16	64,665	19,999	48,500	57,250	80,500
30-34	19	57,036	11,029	50,000	55,000	65,000
35-39	20	57,327	15,033	45,921	53,000	68,500
Specialty chemicals						
Total	466	52,364	16,867	41,000	50,000	60,000
5-9	54	38,328	6,664	34,500	37,960	42,000
10-14	89	45,358	9,171	40,000	44,000	50,000
15-19	81	52,351	12,985	44,000	50,500	57,000
20-24	73	54,368	13,743	45,000	52,200	63,000
25-29	49	60,248	20,770	45,000	56,000	67,300
30-34	42	61,531	19,882	50,000	57,600	72,000
35-39	42	65,744	22,423	50,000	61,125	77,450
40 or more	26	55,536	13,769	49,400	55,000	64,000
Agricultural chemicals						
Total	133	48,069	12,991	37,500	46,000	55,000
10-14	24	40,341	7,265	35,313	39,500	44,200
15-19	31	45,509	9,166	37,500	45,000	51,000
20-24	20	49,735	8,421	45,500	50,000	53,600
30-34	19	57,259	10,836	50,000	57,500	63,000
Biochemical products						
Total	57	48,941	17,417	37,400	44,000	60,000

Table 2.3.3 (Continued)

TYPE OF INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Coatings						
Total	175	48,589	13,073	39,200	48,000	55,000
5-9	35	37,558	6,309	33,000	36,500	43,000
10-14	35	46,134	7,348	41,500	45,000	50,000
15-19	35	51,381	12,436	44,000	50,000	56,000
20-24	21	51,085	11,618	44,800	49,000	59,000
25-29	19	57,111	11,799	50,000	52,000	70,000
Electronics						
Total	116	50,709	13,345	41,365	49,440	58,150
5-9	20	41,358	6,901	38,100	40,000	47,400
10-14	29	47,773	10,725	40,800	47,372	52,000
15-19	15	48,153	9,339	42,000	48,000	57,000
20-24	16	53,129	9,645	48,000	51,250	60,000
Food						
Total	137	50,440	21,415	39,200	47,000	59,100
5-9	18	34,096	6,853	30,000	33,325	39,200
10-14	20	49,020	11,393	41,500	48,250	55,500
15-19	32	49,523	11,494	40,900	48,200	55,636
20-24	20	49,924	19,678	37,700	41,500	55,750
Glass						
Total	26	51,965	17,080	39,108	45,750	60,000
Paper						
Total	46	51,247	16,928	38,810	45,828	60,000
Petroleum						
Total	128	56,530	20,660	42,050	52,750	64,500
10-14	21	46,552	11,333	38,000	45,500	50,128
15-19	23	51,520	10,829	44,000	51,000	60,000
20-24	17	53,733	11,733	48,000	54,000	58,000
25-29	18	63,944	14,837	54,000	62,000	75,000
Pharmaceuticals						
Total	776	47,738	15,555	37,000	44,000	54,108
2-4	27	32,486	3,757	31,000	33,000	34,600
5-9	167	36,236	5,161	32,800	36,000	38,800
10-14	178	42,734	9,362	37,800	42,000	45,240
15-19	139	49,119	11,244	42,000	47,197	55,000
20-24	95	57,855	17,938	46,200	54,000	65,000
25-29	79	56,859	13,820	47,000	54,000	63,000
30-34	43	63,575	24,423	48,000	56,000	72,000
35-39	32	61,368	15,589	50,500	57,750	75,000
40 or more	16	62,294	12,982	52,000	64,250	72,800
Plastics						
Total	176	53,741	18,030	42,125	51,860	61,565
5-9	23	39,528	7,152	34,500	40,000	41,900
10-14	28	45,050	7,761	39,000	44,550	52,000
15-19	30	54,507	9,896	46,000	54,250	60,000
20-24	22	52,155	15,013	43,500	51,750	60,000
25-29	18	57,668	15,143	48,000	54,635	69,500
30-34	20	59,358	10,976	50,675	60,600	66,250
35-39	25	65,692	29,586	48,000	62,400	68,000

Table 2.3.3 (Continued)

TYPE OF INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Rubber						
Total	64	52,484	17,274	39,500	49,096	62,750
Soaps						
Total	54	51,606	16,199	37,500	50,000	60,000
Steel or ferrous metals						
Total	21	47,058	12,702	37,097	45,000	56,000
Other metals, minerals						
Total	56	50,445	20,996	39,100	49,900	55,800
Other manufactures						
Total	458	51,674	19,689	39,600	48,250	59,650
5-9	60	36,411	7,013	32,000	35,300	40,800
10-14	89	45,398	11,208	37,500	44,000	51,500
15-19	94	49,681	11,610	40,800	48,250	57,800
20-24	72	56,436	29,033	44,500	53,500	60,608
25-29	63	58,564	18,274	44,000	58,000	68,000
30-34	31	62,224	16,296	51,876	58,000	70,000
35-39	27	61,171	18,492	51,000	59,000	67,000
40 or more	19	71,039	30,076	50,400	65,000	78,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.4

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY
by GEOGRAPHIC REGION and YEARS SINCE BS
1990 ACS Salary Survey

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific						
Total	360	51,586	24,544	39,000	47,000	60,000
5-9	65	37,854	6,948	33,390	37,400	41,000
10-14	81	46,446	12,015	39,375	44,000	52,050
15-19	66	49,643	13,978	41,000	47,000	57,000
20-24	48	59,827	19,703	46,000	55,000	70,126
25-29	32	58,007	17,598	45,500	53,000	66,600
30-34	34	59,667	11,652	51,876	61,092	68,536
35-39	20	66,355	15,695	58,500	64,000	71,000
Mountain						
Total	94	44,913	14,948	35,000	42,288	52,000
10-14	15	40,193	9,447	33,000	40,200	45,000
15-19	19	43,672	10,570	38,760	41,520	50,075
20-24	18	47,847	12,974	36,000	49,200	58,000
West North Central						
Total	199	48,036	16,091	37,100	45,720	55,000
5-9	29	34,843	6,164	31,000	34,400	40,000
10-14	55	44,808	11,545	37,800	42,000	50,000
15-19	36	48,380	9,695	42,000	48,730	53,902
20-24	28	49,015	12,734	39,900	49,875	54,100
25-29	18	58,760	14,953	47,000	56,000	70,000
West South Central						
Total	261	50,802	19,071	37,000	47,000	60,000
5-9	44	35,922	7,119	32,062	36,630	41,250
10-14	46	43,437	10,462	36,500	42,150	48,300
15-19	48	48,494	12,679	38,500	47,500	59,000
20-24	48	54,172	15,156	40,500	54,500	64,000
25-29	20	60,820	18,587	51,000	59,950	75,750
30-34	23	60,625	15,046	50,000	58,370	70,000
East North Central						
Total	821	49,491	16,022	38,340	46,300	57,500
2-4	22	33,288	5,107	31,000	33,450	35,500
5-9	140	35,835	6,304	32,000	35,000	39,000
10-14	150	43,072	8,895	37,000	42,000	49,650
15-19	154	50,219	12,712	40,800	48,270	55,110
20-24	124	54,433	13,266	45,000	52,000	64,020
25-29	99	58,174	16,151	46,300	56,000	69,750
30-34	54	61,199	19,021	49,000	60,000	72,000
35-39	57	62,318	19,531	50,000	60,000	73,776
40 or more	21	62,990	23,377	46,800	62,400	70,000
East South Central						
Total	109	47,732	13,378	39,800	46,000	56,000
5-9	16	36,002	8,033	30,700	34,500	38,134
10-14	21	41,996	8,757	39,800	43,500	47,000
15-19	15	47,071	10,305	38,000	48,000	55,000
20-24	18	50,540	10,737	42,000	46,006	58,500

Table 2.3.4 (Continued)

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Middle Atlantic						
Total	980	51,782	17,956	40,000	48,050	59,334
2-4	26	32,302	4,592	29,500	33,500	35,000
5-9	140	38,695	5,943	35,000	37,746	42,000
10-14	194	45,487	9,522	39,000	43,450	50,000
15-19	157	49,559	10,782	43,000	48,000	55,575
20-24	127	54,710	15,522	46,200	51,000	61,000
25-29	108	58,669	17,650	48,000	54,300	65,750
30-34	80	62,890	19,565	49,000	59,418	72,000
35-39	84	62,981	23,365	50,000	60,000	69,780
40 or more	64	66,850	28,695	52,000	62,000	72,850
South Atlantic						
Total	467	50,387	18,937	39,900	48,000	56,400
5-9	66	36,866	6,665	32,600	36,430	40,000
10-14	99	45,836	9,953	40,000	45,000	50,000
15-19	83	49,172	9,831	42,384	48,000	55,000
20-24	72	58,839	31,331	46,254	54,000	63,000
25-29	51	54,823	17,725	45,000	52,000	60,000
30-34	36	57,286	17,103	44,825	56,518	70,000
35-39	29	61,393	17,801	47,113	59,100	72,000
40 or more	20	61,603	23,786	50,200	58,500	76,750
New England						
Total	296	52,008	16,357	40,000	50,000	60,000
5-9	55	38,405	7,372	34,000	38,000	42,200
10-14	59	44,822	9,944	38,000	43,450	49,000
15-19	61	52,614	14,875	42,000	50,000	60,000
20-24	29	60,212	14,192	51,000	60,000	66,000
25-29	37	59,996	14,919	52,000	59,800	69,000
30-34	23	66,989	22,454	52,000	61,000	72,000
35-39	19	59,761	14,472	50,000	60,000	65,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.5

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY
by SELECTED STATES and YEARS SINCE BS
1990 ACS Salary Survey

SELECTED STATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Arkansas						
Total	17	45,557	17,540	35,000	40,000	50,000
California						
Total	300	52,697	26,034	39,800	48,000	60,300
5-9	56	38,625	6,474	34,410	38,000	41,050
10-14	66	47,243	11,534	40,000	45,000	54,000
15-19	57	50,538	14,293	42,000	48,000	57,000
20-24	40	60,766	20,221	46,750	55,500	71,126
25-29	24	60,317	19,117	45,500	58,500	80,000
30-34	28	61,119	11,661	55,000	65,500	69,870
35-39	16	68,725	15,946	58,500	66,000	76,150
Colorado						
Total	47	46,703	16,458	36,000	44,000	56,000
15-19	15	45,373	9,759	38,760	44,000	55,000
Connecticut						
Total	109	51,974	14,288	40,000	51,000	60,500
5-9	25	39,733	6,842	35,640	38,800	42,600
10-14	20	46,594	14,354	36,355	43,135	50,753
15-19	22	56,091	16,111	44,000	53,500	68,000
Delaware						
Total	72	52,516	15,161	41,880	49,600	57,200
10-14	15	43,853	5,831	40,800	43,200	49,200
15-19	19	53,915	11,232	47,700	53,260	56,400
Florida						
Total	41	54,882	15,805	46,860	52,201	62,500
Georgia						
Total	59	49,833	32,555	38,500	45,000	53,000
Illinois						
Total	221	50,155	16,536	38,000	46,300	60,000
5-9	41	36,664	5,375	34,000	36,400	39,600
10-14	49	43,626	8,891	38,500	42,000	49,650
15-19	37	50,931	11,412	41,000	51,360	55,120
20-24	28	55,520	12,388	46,465	59,350	66,900
25-29	30	60,760	14,765	47,000	61,500	70,000
30-34	17	64,659	24,308	50,000	60,000	72,000
Indiana						
Total	114	47,681	16,659	34,560	44,800	55,380
5-9	23	33,744	6,537	30,575	32,000	35,000
10-14	20	41,209	12,242	33,500	36,840	45,500
15-19	16	49,670	13,003	40,500	48,200	57,190
20-24	24	54,223	13,769	45,880	50,000	57,500
25-29	15	62,942	20,955	51,000	56,000	75,000
Iowa						
Total	15	46,260	15,439	33,000	47,000	58,200
Kansas						
Total	25	40,628	9,978	34,000	40,200	44,000
Kentucky						
Total	34	48,454	16,127	40,063	44,910	54,000

Table 2.3.5 (Continued)

SELECTED STATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Louisiana						
Total	33	53,026	15,912	41,000	48,633	62,500
Maryland						
Total	57	48,454	18,647	37,000	47,197	54,902
Massachusetts						
Total	148	53,129	17,584	40,956	50,000	60,550
5-9	24	37,366	8,374	30,250	36,750	40,000
10-14	24	45,118	6,765	40,000	45,060	49,250
15-19	36	51,345	14,326	41,181	49,900	59,550
20-24	15	59,998	18,568	43,000	56,020	69,500
25-29	20	63,328	16,175	51,356	62,550	71,500
Michigan						
Total	184	49,032	14,491	38,500	46,825	55,900
5-9	38	37,256	7,826	32,000	35,400	39,200
10-14	31	42,696	7,241	38,000	42,000	49,320
15-19	40	51,151	12,931	40,000	47,500	55,555
20-24	24	58,427	13,078	48,500	58,050	64,020
25-29	22	57,388	17,377	45,000	49,700	73,750
Missouri						
Total	86	46,762	13,806	36,800	45,000	52,000
10-14	27	42,376	6,910	39,052	42,000	45,300
New Hampshire						
Total	20	47,254	13,300	39,500	43,000	54,000
New Jersey						
Total	454	52,640	18,883	40,000	49,000	60,000
5-9	62	38,597	6,227	35,000	36,650	41,000
10-14	91	45,652	9,632	39,000	44,000	51,000
15-19	70	49,813	11,608	42,640	47,500	56,000
20-24	56	55,054	12,595	48,000	51,750	60,500
25-29	54	61,432	19,610	48,000	55,620	70,000
30-34	40	61,229	20,693	45,335	55,000	69,500
35-39	40	66,478	29,459	49,500	62,280	76,800
40 or more	30	66,151	26,259	52,000	62,304	72,800
New York						
Total	263	52,951	19,080	41,600	49,000	60,000
5-9	35	39,371	5,600	35,000	40,150	43,000
10-14	51	45,075	8,835	40,000	44,000	49,828
15-19	37	49,295	10,275	43,000	48,000	56,000
20-24	36	54,826	16,069	45,000	52,000	62,000
25-29	30	57,804	17,006	45,000	53,950	67,900
30-34	18	68,466	18,140	59,000	68,250	75,600
35-39	31	60,599	17,538	50,000	57,000	65,000
40 or more	19	76,126	35,624	53,800	64,800	85,000

Table 2.3.5 (Continued)

SELECTED STATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
North Carolina						
Total	115	48,604	16,074	38,000	45,240	55,100
5-9	20	36,312	3,787	32,940	36,430	38,000
10-14	24	41,682	5,303	38,861	41,650	45,620
15-19	20	47,684	7,569	41,152	46,250	54,460
20-24	20	61,281	24,838	50,500	56,750	67,112
Ohio						
Total	241	51,065	16,714	40,000	48,300	60,000
5-9	27	35,213	4,863	32,000	35,000	39,000
10-14	37	44,647	7,907	38,500	44,000	50,000
15-19	51	49,793	14,314	42,000	47,300	55,000
20-24	37	52,270	13,466	42,000	51,896	62,000
25-29	27	53,777	14,542	41,000	53,500	67,300
35-39	30	64,638	23,580	49,000	61,800	73,776
Oklahoma						
Total	30	52,150	19,388	39,000	45,710	62,880
Oregon						
Total	22	41,914	11,658	34,500	40,500	48,500
Pennsylvania						
Total	263	49,133	14,646	38,850	47,000	55,800
5-9	43	38,285	5,886	35,000	37,692	42,000
10-14	52	45,601	10,130	38,500	42,350	52,400
15-19	50	49,398	10,130	43,000	48,250	54,660
20-24	35	54,039	19,231	44,000	50,000	60,000
25-29	24	53,534	12,333	49,075	52,000	61,083
30-34	22	61,347	18,547	50,000	58,993	70,000
40 or more	15	56,498	20,317	46,000	58,300	65,000
South Carolina						
Total	31	51,707	13,465	41,600	50,000	58,320
Tennessee						
Total	56	47,727	12,282	39,900	46,500	56,716
10-14	15	40,168	8,786	35,200	42,600	47,000
Texas						
Total	181	50,666	19,714	36,800	47,800	59,640
5-9	34	36,468	7,228	31,800	36,840	41,900
10-14	34	43,896	11,047	36,500	42,750	48,650
15-19	35	48,847	13,533	37,000	49,680	60,000
20-24	30	56,564	16,111	41,400	54,500	67,500
30-34	17	60,469	15,588	50,000	56,000	62,000
Virginia						
Total	68	49,998	15,676	41,500	50,000	58,200
25-29	15	54,672	14,861	48,500	51,700	67,000
Washington						
Total	36	48,990	14,843	39,800	46,700	57,875
Wisconsin						
Total	61	45,637	13,847	36,500	42,700	52,600

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.6

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY
by SELECTED METROPOLITAN AREAS and YEARS SINCE BS
1990 ACS Salary Survey

METROPOLITAN AREAS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Atlanta						
Total	41	50,853	38,068	38,500	45,000	52,500
Baltimore						
Total	38	47,019	17,477	35,000	46,099	53,000
Boston						
Total	118	52,370	17,875	40,000	50,000	60,000
5-9	23	37,664	8,430	30,000	37,500	40,000
10-14	18	45,758	7,165	42,000	45,150	50,000
15-19	28	48,464	10,771	40,995	48,630	56,500
25-29	18	62,448	16,848	50,712	60,050	70,000
Chicago						
Total	201	50,617	16,965	38,500	46,930	60,000
5-9	39	36,787	5,414	34,000	36,400	39,600
10-14	45	44,376	8,755	38,880	42,640	50,160
15-19	33	51,207	11,049	41,000	51,360	54,500
20-24	27	55,576	12,565	46,000	60,000	67,000
25-29	25	62,032	15,772	47,000	62,000	70,000
30-34	17	65,041	24,181	50,000	60,000	72,000
Cincinnati						
Total	67	50,106	15,337	39,720	45,000	56,000
10-14	16	43,798	6,050	38,750	43,870	45,000
20-24	16	48,005	10,549	40,740	49,700	52,450
Cleveland-Akron						
Total	54	56,294	21,334	43,000	51,750	65,000
Columbus						
Total	27	44,542	13,740	34,300	42,000	56,000
Dallas						
Total	31	49,598	17,869	36,000	46,800	60,000
Dayton						
Total	17	48,524	15,720	38,000	49,000	52,800
Denver						
Total	29	46,701	18,056	35,900	44,000	55,000
Detroit						
Total	87	47,167	13,182	38,500	45,000	53,000
5-9	21	37,638	8,163	32,500	38,500	41,000
10-14	16	42,917	7,868	38,250	41,250	49,760
15-19	18	48,042	13,913	40,000	45,000	49,488
Houston-Beaumont						
Total	106	51,003	21,184	36,840	46,100	59,500
5-9	19	37,468	5,021	33,800	36,840	41,500
10-14	19	42,880	7,962	38,000	41,000	48,650
15-19	20	48,298	13,032	36,500	46,100	61,050
20-24	18	58,619	16,464	48,000	55,000	69,756
Los Angeles						
Total	95	52,504	16,341	40,000	50,000	61,440
5-9	16	39,515	6,957	34,660	39,200	43,464
10-14	17	46,653	9,412	39,200	45,000	54,000

Table 2.3.6 (Continued)

METROPOLITAN AREAS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Newark						
Total	286	52,385	19,049	40,000	49,038	58,000
5-9	43	38,112	5,847	35,000	36,500	40,000
10-14	57	46,301	8,689	39,900	45,000	52,000
15-19	43	51,378	12,523	43,779	50,000	60,000
20-24	36	53,295	11,464	46,350	51,000	58,500
25-29	33	63,870	20,790	50,400	57,000	72,300
30-34	26	54,505	15,215	44,000	52,088	60,000
35-39	22	69,655	34,757	50,000	61,140	75,000
40 or more	20	65,675	27,157	51,000	58,500	70,350
New York						
Total	73	56,714	24,545	43,600	50,000	61,250
Philadelphia						
Total	154	50,723	15,935	39,000	47,500	60,000
5-9	24	39,182	5,410	35,000	38,345	42,500
10-14	34	46,385	10,543	39,260	42,500	52,800
15-19	26	51,085	10,443	43,000	51,400	58,140
20-24	16	59,067	24,054	46,000	50,735	63,500
25-29	16	55,992	12,056	49,075	55,000	62,050
30-34	17	63,180	20,115	50,000	65,000	72,000
Pittsburgh						
Total	45	48,534	12,379	39,000	48,600	52,860
St. Louis						
Total	64	44,713	11,741	36,705	43,500	49,875
10-14	24	41,382	6,119	38,276	41,750	45,050
San Francisco						
Total	140	52,985	16,377	41,000	50,000	60,772
5-9	24	38,312	5,980	34,750	38,000	40,400
10-14	36	48,412	10,725	41,000	46,250	54,585
15-19	23	52,663	13,388	43,924	49,500	60,000
20-24	21	60,857	19,283	48,000	56,000	65,000
Washington, DC						
Total	39	51,773	20,498	40,000	49,600	57,400

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.7

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY
by SUPERVISORY STATUS and YEARS SINCE BS
1990 ACS Salary Survey

SUPERVISORY STATUS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Non-supervisors						
Total	1802	44,426	12,119	36,000	42,190	51,000
2-4	75	32,525	4,712	30,450	33,000	35,000
5-9	409	35,773	5,649	32,000	35,620	39,000
10-14	378	41,582	7,707	36,610	41,000	45,100
15-19	292	45,338	9,044	39,760	45,000	51,250
20-24	202	48,477	9,809	42,600	49,038	54,500
25-29	151	52,438	12,931	45,000	51,000	58,500
30-34	113	53,524	12,433	44,800	53,000	60,743
35-39	118	56,055	14,410	47,000	53,250	65,000
40 or more	64	57,107	19,712	44,500	55,000	70,000
Supervisors						
Total	1648	57,370	21,281	44,881	54,000	65,000
5-9	147	40,955	7,479	35,000	40,000	46,000
10-14	311	48,342	11,116	40,500	47,000	53,616
15-19	322	53,875	13,070	45,000	52,250	60,500
20-24	293	60,783	21,146	49,335	58,500	68,200
25-29	215	62,476	18,124	50,712	60,000	71,500
30-34	155	66,094	20,142	53,000	62,000	76,500
35-39	118	70,467	24,693	56,500	65,850	77,000
40 or more	78	77,303	46,183	55,050	64,750	85,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.3.8

SALARIES of MS CHEMISTS employed FULL-TIME
by TOTAL SUBORDINATES and YEARS SINCE BS
1990 ACS Salary Survey

TOTAL SUBORDINATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
None						
Total	1245	43,906	12,134	35,400	42,000	50,000
2-4	53	31,812	4,336	30,000	33,000	34,000
5-9	298	35,569	5,601	32,000	35,350	38,500
10-14	262	41,766	8,584	36,500	41,238	45,000
15-19	195	44,520	8,686	39,000	44,000	50,075
20-24	138	48,327	10,893	41,400	48,950	55,000
25-29	113	51,430	13,138	45,000	50,400	58,200
30-34	77	54,308	13,282	44,800	53,000	65,000
35-39	73	54,854	12,998	44,000	54,000	65,000
40 or more	36	57,951	20,579	45,000	55,000	70,000
1-2						
Total	895	48,291	12,896	39,400	46,500	55,050
2-4	15	34,930	5,759	33,000	34,500	37,200
5-9	132	36,822	6,319	32,500	36,820	40,900
10-14	190	43,505	7,785	38,000	43,050	48,000
15-19	170	48,395	10,546	41,000	47,750	55,000
20-24	115	49,748	9,944	42,700	50,000	56,000
25-29	93	54,569	14,445	46,000	53,000	60,000
30-34	60	55,106	10,995	49,050	56,000	61,685
35-39	72	59,891	15,127	48,536	56,750	67,840
40 or more	48	61,011	14,838	51,750	60,030	68,910
3-9						
Total	883	51,248	14,788	41,600	50,000	59,650
5-9	107	39,610	7,366	35,000	39,600	44,000
10-14	175	46,226	9,663	39,400	45,120	51,500
15-19	172	49,793	10,146	43,000	49,900	55,788
20-24	152	54,529	14,825	46,500	53,000	62,500
25-29	102	55,774	13,941	46,020	54,000	63,200
30-34	82	59,830	16,259	48,000	59,000	67,000
35-39	52	62,110	18,629	49,500	60,400	71,000
40 or more	29	63,542	25,296	50,508	62,000	69,000
10-14						
Total	203	59,990	32,516	47,000	56,000	66,000
5-9	22	39,630	6,983	33,000	40,032	45,000
10-14	44	50,599	10,349	45,000	51,350	56,600
15-19	36	54,770	12,815	46,800	55,000	60,500
20-24	28	72,864	41,968	56,500	65,008	73,000
25-29	19	68,993	12,238	60,000	69,000	76,500
35-39	21	66,875	14,128	56,000	60,000	77,000
40 or more	17	83,659	84,479	54,000	60,000	86,000

Table 2.3.8 (Continued)

TOTAL SUBORDINATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
15-29						
Total	200	62,529	18,659	49,000	60,000	72,700
10-14	30	54,977	15,750	43,000	51,000	60,000
15-19	40	58,808	13,864	49,110	58,800	66,700
20-24	33	63,517	14,571	54,000	62,000	70,000
25-29	35	68,662	18,448	54,000	66,000	80,000
30-34	22	69,418	23,407	53,100	60,000	83,000
35-39	15	75,693	18,221	62,400	75,000	90,000
30-49						
Total	77	65,448	18,007	53,000	65,000	76,000
15-19	18	70,233	16,752	59,000	68,500	78,000
20-24	20	66,795	17,157	52,250	63,450	78,500
50-99						
Total	80	74,830	24,259	56,510	72,000	90,000
20-24	20	74,875	15,439	68,002	70,000	83,500
100 or more						
Total	44	95,581	35,514	75,000	87,350	106,300

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.1

SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY
by WORK SPECIALTY and YEARS SINCE BS
1990 ACS Salary Survey

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemistry						
Total	286	64,125	26,654	50,000	58,250	67,800
5-9	15	49,467	11,724	42,000	47,000	53,000
10-14	67	52,615	8,576	48,000	51,500	57,500
15-19	74	58,264	14,460	50,400	57,000	60,000
20-24	56	62,820	17,205	54,750	60,500	66,500
25-29	32	81,023	34,160	57,750	68,900	102,250
35-39	18	88,546	55,350	62,000	82,859	97,000
Biotechnology						
Total	333	65,753	23,993	50,100	60,000	72,000
5-9	34	45,970	6,392	42,000	46,150	50,000
10-14	86	56,644	12,883	48,204	55,000	62,000
15-19	98	61,627	14,787	53,000	59,000	66,000
20-24	47	73,821	21,156	60,000	70,200	83,000
25-29	35	83,954	29,074	62,000	73,000	110,000
30-34	18	96,467	45,232	61,000	82,950	115,000
General chemistry						
Total	135	75,130	43,547	56,000	68,000	83,000
15-19	18	62,160	12,199	56,100	63,250	69,000
20-24	29	69,502	20,314	59,600	69,000	76,000
25-29	33	85,989	33,926	65,000	76,000	95,000
35-39	15	79,067	22,231	68,000	77,000	100,000
Agricultural chemistry						
Total	367	64,131	20,305	50,600	59,000	72,000
5-9	18	45,427	2,838	44,500	45,700	47,000
10-14	79	49,292	6,223	45,500	49,000	52,500
15-19	67	58,262	9,422	52,000	58,000	63,000
20-24	59	63,869	14,325	53,000	61,440	72,600
25-29	70	71,574	19,030	60,000	69,100	77,000
35-39	26	84,584	25,323	66,840	84,095	102,250
Analytical chemistry						
Total	1440	59,027	15,432	48,300	56,000	66,000
5-9	205	46,102	5,075	43,500	46,000	49,200
10-14	323	52,141	8,343	46,800	51,200	56,200
15-19	277	58,772	10,187	52,000	58,000	65,000
20-24	264	63,551	16,417	52,900	62,000	71,730
25-29	184	68,409	16,054	56,940	65,400	78,400
30-34	89	69,682	20,961	59,400	67,100	77,220
35-39	69	70,481	19,775	57,000	68,000	80,000
40 or more	29	68,873	18,853	54,000	67,200	83,000
Clinical chemistry						
Total	98	64,041	20,379	48,000	58,648	75,000
10-14	18	49,316	5,646	45,324	47,400	53,000
15-19	19	64,674	22,524	51,000	58,000	72,500
20-24	31	64,299	14,528	51,300	62,000	75,000
30-34	37	80,141	25,241	62,000	74,500	86,000

Table 2.4.1 (Continued)

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Environmental chemistry						
Total	315	64,531	21,860	50,000	61,700	74,000
5-9	18	43,225	6,975	38,500	43,100	47,000
10-14	47	50,774	13,534	41,800	48,500	55,000
15-19	59	57,443	11,715	48,500	57,000	65,000
20-24	57	66,130	18,498	54,000	63,000	77,000
25-29	59	71,304	21,821	60,000	67,000	77,300
30-34	34	82,427	29,620	65,000	75,000	90,000
35-39	26	74,509	23,394	58,000	64,800	90,000
40 or more	15	70,513	21,590	60,000	72,000	83,000
Inorganic chemistry						
Total	378	60,325	15,651	49,000	57,102	68,000
5-9	49	46,234	3,460	44,400	46,000	47,800
10-14	102	52,551	8,901	47,000	52,000	58,000
15-19	67	59,295	10,677	52,344	57,708	64,100
20-24	54	62,269	11,950	55,000	60,000	69,000
25-29	39	73,888	19,776	58,800	70,000	81,938
30-34	25	71,050	15,897	64,000	69,000	75,050
35-39	25	76,814	13,371	67,700	78,000	82,500
40 or more	17	74,333	21,077	65,245	72,700	86,000
Materials science						
Total	610	66,907	22,862	52,000	62,000	75,000
5-9	50	50,030	19,328	45,100	47,300	50,200
10-14	119	53,117	7,321	48,120	52,000	58,000
15-19	104	63,193	24,326	54,100	60,000	68,000
20-24	93	70,555	14,825	60,000	67,500	77,584
25-29	98	73,142	18,846	60,700	71,000	80,500
30-34	63	82,098	25,853	65,000	72,500	93,000
35-39	54	76,473	24,739	62,500	72,220	83,000
40 or more	29	82,318	35,078	60,000	73,000	89,000
Medicinal/Pharmaceutical						
Total	776	67,466	28,240	51,192	60,000	76,000
5-9	96	48,557	4,769	46,000	48,000	51,250
10-14	206	54,988	10,299	49,300	54,000	60,000
15-19	132	63,131	15,412	55,000	60,500	68,800
20-24	117	75,842	45,956	60,000	70,000	81,000
25-29	80	78,642	23,650	61,600	74,000	90,500
30-34	63	83,583	30,396	61,000	78,000	100,000
35-39	51	91,917	28,859	73,300	86,000	102,000
40 or more	31	93,971	25,317	76,000	94,000	110,000
Organic chemistry						
Total	1544	62,864	22,037	50,000	59,000	70,750
5-9	175	46,299	4,530	43,700	45,710	49,000
10-14	321	52,266	8,484	47,000	51,000	56,000
15-19	276	58,192	11,165	51,000	57,000	63,000
20-24	252	66,185	14,829	57,000	65,000	73,750
25-29	227	73,138	19,216	60,000	70,000	82,200
30-34	129	74,165	25,514	60,000	72,500	82,700
35-39	107	78,800	41,370	61,000	73,500	87,000
40 or more	56	85,702	41,548	65,000	75,400	95,600

Table 2.4.1 (Continued)

WORK SPECIALTY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Physical chemistry						
Total	548	64,560	20,285	51,490	60,204	72,000
5-9	47	48,581	7,628	45,200	47,500	49,500
10-14	109	52,569	8,386	46,000	52,000	57,000
15-19	117	61,952	10,038	54,700	61,000	68,000
20-24	89	66,417	15,036	55,440	64,000	74,280
25-29	69	76,476	27,465	64,012	72,700	82,000
30-34	46	76,661	25,905	61,650	71,800	83,000
35-39	48	76,649	24,047	60,400	71,250	85,888
40 or more	23	74,952	29,964	57,500	66,200	80,000
Polymer chemistry						
Total	1558	65,929	21,719	52,000	61,710	74,000
5-9	151	47,564	4,511	45,000	47,800	50,000
10-14	282	52,733	7,891	47,300	51,380	57,000
15-19	230	59,679	9,897	54,000	58,370	64,700
20-24	237	69,888	30,399	58,000	66,000	75,000
25-29	264	75,980	21,372	62,000	71,346	85,000
30-34	168	75,741	18,235	63,250	72,000	85,000
35-39	145	79,822	23,983	64,800	76,000	94,000
40 or more	81	74,285	17,905	61,000	71,000	83,000
Other chemical science						
Total	221	63,828	20,237	48,000	60,000	74,000
5-9	21	45,267	7,081	45,000	46,200	48,500
10-14	43	50,216	8,884	44,000	50,000	55,100
15-19	37	58,275	11,668	53,000	58,000	63,360
20-24	34	66,845	15,142	60,000	69,050	75,000
25-29	30	75,820	18,543	65,400	75,145	86,000
30-34	24	72,391	22,621	56,046	72,500	85,700
35-39	24	83,226	24,727	66,435	79,650	94,180
Business Administration						
Total	277	90,757	45,182	66,100	80,000	100,000
10-14	21	61,214	14,587	49,000	60,000	68,400
15-19	40	72,101	15,594	61,500	70,000	78,700
20-24	45	79,224	17,626	66,000	79,000	91,500
25-29	69	91,848	39,195	70,000	83,000	100,000
30-34	49	96,146	31,907	75,000	93,000	108,000
35-39	32	115,478	48,488	81,000	104,000	134,000
40 or more	15	152,499	114,160	74,240	105,000	190,000
Other non-chem						
Total	332	73,860	32,061	55,000	68,320	87,380
10-14	31	51,494	9,757	47,000	52,000	58,150
15-19	54	62,370	16,031	54,000	61,500	70,000
20-24	77	72,593	19,142	59,900	71,000	82,000
25-29	63	78,695	25,213	58,600	74,700	91,000
30-34	42	83,238	42,202	55,692	74,500	98,000
35-39	37	94,743	57,389	64,872	85,380	100,000
40 or more	21	79,862	27,471	62,000	73,112	89,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.2

SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY
by WORK FUNCTION and YEARS SINCE BS
1990 ACS Salary Survey

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
R&D Mgt						
Total	2097	79,772	25,620	63,300	75,000	90,000
5-9	24	61,517	30,900	48,680	50,000	58,000
10-14	233	60,658	11,913	54,000	59,000	65,000
15-19	368	69,221	18,309	59,950	66,658	75,650
20-24	461	76,697	17,400	65,000	74,000	86,000
25-29	474	84,892	22,348	70,000	80,000	95,000
30-34	244	90,390	28,720	72,000	86,250	100,000
35-39	195	97,722	34,085	77,000	91,000	110,000
40 or more	98	96,864	36,149	79,500	90,000	105,000
Basic research						
Total	1286	58,679	13,881	49,000	55,025	65,000
5-9	220	47,135	4,569	45,000	47,750	50,000
10-14	391	52,992	8,363	48,000	52,000	56,800
15-19	247	58,468	8,613	53,000	58,000	63,000
20-24	160	64,704	11,679	56,850	62,650	72,000
25-29	115	70,915	14,893	61,000	70,000	80,000
30-34	71	71,053	18,062	60,000	70,000	80,000
35-39	49	76,949	14,869	65,700	78,000	85,000
40 or more	33	78,995	18,722	68,000	78,000	87,000
Applied research						
Total	4088	57,840	15,293	48,075	55,000	64,560
5-9	576	46,685	4,838	44,000	46,500	49,250
10-14	990	51,017	6,846	46,400	50,100	55,000
15-19	786	57,034	9,363	51,000	56,000	61,000
20-24	599	62,173	22,176	54,000	60,100	68,000
25-29	443	65,602	12,540	57,500	65,000	72,200
30-34	290	68,262	17,788	58,812	65,390	75,000
35-39	266	70,094	18,059	58,500	67,750	79,000
40 or more	137	68,893	17,380	60,000	67,000	77,000
General Mgt						
Total	445	90,822	50,970	63,500	78,750	100,000
10-14	34	59,391	12,364	51,000	58,662	64,500
15-19	53	65,878	14,630	57,000	65,000	73,800
20-24	77	84,238	50,157	69,000	78,000	90,100
25-29	100	97,867	43,588	66,500	85,500	120,375
30-34	79	98,728	39,525	72,000	89,100	125,000
35-39	62	105,358	65,320	72,000	88,875	115,000
40 or more	30	126,559	88,396	75,000	100,000	148,000
Marketing						
Total	324	63,184	16,055	51,375	61,000	73,000
10-14	59	51,829	7,758	48,000	50,640	57,000
15-19	50	59,329	15,330	50,000	60,000	69,000
20-24	64	67,537	16,923	55,850	64,300	77,000
25-29	72	69,575	15,459	59,700	69,500	81,000
30-34	35	68,385	14,747	60,000	67,000	75,000
35-39	26	66,385	14,606	60,000	66,435	75,000

Table 2.4.2 (Continued)

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Production						
Total	279	56,202	16,646	45,800	55,000	65,000
5-9	26	43,989	4,453	41,500	44,750	47,148
10-14	52	48,235	9,282	43,250	48,060	53,000
15-19	48	52,918	12,581	42,200	55,000	60,100
20-24	62	59,260	15,677	48,900	59,500	68,400
25-29	47	60,918	16,716	54,000	60,000	68,000
30-34	15	68,427	19,245	60,000	70,000	78,000
35-39	20	69,030	27,147	50,000	57,500	83,700
Health & Safety						
Total	183	68,971	20,282	55,200	65,000	80,000
10-14	16	51,746	10,625	46,850	51,500	57,050
15-19	23	61,892	10,678	57,000	60,000	65,000
20-24	32	67,256	19,858	52,500	65,500	78,000
25-29	39	71,216	17,251	58,000	66,300	83,000
30-34	30	77,802	27,830	60,648	73,590	92,000
35-39	28	77,378	20,759	61,500	76,000	92,500
Forensics						
Total	103	55,101	11,792	47,000	54,100	63,000
10-14	22	48,246	7,273	42,500	47,000	50,200
15-19	22	57,842	9,131	53,600	61,250	63,000
20-24	21	55,350	12,951	47,000	57,000	64,000
Writing						
Total	20	62,682	22,302	47,208	55,000	73,500
Chem info services						
Total	49	62,961	17,151	50,000	58,100	75,000
Computers						
Total	79	55,772	11,718	48,000	55,000	60,000
10-14	19	50,582	8,332	42,600	53,210	58,600
15-19	20	55,296	12,206	47,250	56,000	61,000
20-24	19	58,238	12,305	52,000	57,670	68,000
Consulting						
Total	100	66,058	46,794	47,290	58,016	73,250
10-14	22	52,476	15,994	43,200	48,450	57,000
15-19	18	59,411	13,655	48,300	62,000	66,000
Other						
Total	132	68,381	21,703	52,850	65,000	84,000
10-14	19	55,965	16,741	46,500	52,000	59,000
15-19	20	58,904	12,406	48,880	57,660	69,000
20-24	17	64,711	17,628	57,000	64,180	77,500
25-29	27	77,830	25,011	56,500	73,200	103,700
30-34	17	73,330	21,231	58,200	74,000	87,600

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.3

SALARIES of PhD CHEMISTS employed FULL-TIME
by INDUSTRY and YEARS SINCE BS
1990 ACS Salary Survey

INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Non-manufacturing						
Total	785	63,865	30,670	48,000	59,000	73,000
5-9	71	43,461	8,590	39,000	44,500	48,000
10-14	139	52,942	13,581	44,000	50,000	58,900
15-19	142	59,099	13,228	50,000	59,000	66,580
20-24	138	63,946	18,131	51,521	60,566	75,000
25-29	111	71,397	22,871	55,000	70,000	80,000
30-34	79	75,436	27,865	57,000	73,000	86,000
35-39	64	74,132	26,725	55,500	68,500	85,000
40 or more	41	93,744	95,453	60,000	70,000	80,000
Aerospace						
Total	241	64,642	20,541	51,800	60,944	73,200
5-9	19	46,603	4,536	43,200	46,000	50,200
10-14	35	50,893	7,065	46,000	49,500	55,000
15-19	44	59,155	11,535	54,750	56,150	61,700
20-24	40	65,095	13,116	56,500	62,750	75,000
25-29	35	72,870	22,582	61,000	69,260	80,000
30-34	22	80,165	26,548	67,000	72,430	92,000
35-39	27	72,147	14,177	61,000	75,000	85,000
40 or more	19	75,968	36,245	60,000	70,000	80,000
Basic chemicals						
Total	706	65,211	20,556	50,760	60,000	73,700
5-9	78	46,781	3,634	45,000	46,050	48,400
10-14	125	52,062	6,428	47,100	50,340	56,200
15-19	132	57,646	8,133	51,750	56,970	60,650
20-24	106	68,565	14,355	60,000	67,000	75,540
25-29	105	79,461	26,038	64,500	72,000	87,600
30-34	66	79,889	19,385	67,500	75,250	90,000
35-39	69	78,846	23,399	63,500	74,000	83,400
40 or more	24	79,170	28,836	59,550	71,000	92,300
Specialty chemicals						
Total	1549	64,681	24,261	50,000	60,000	72,000
5-9	141	46,529	4,670	44,316	46,400	48,500
10-14	299	51,027	8,105	46,500	50,000	55,000
15-19	257	59,338	11,199	51,780	57,400	64,500
20-24	252	66,503	15,455	56,500	63,250	74,900
25-29	268	74,974	25,008	60,830	69,900	82,000
30-34	155	75,311	24,538	60,000	70,000	85,000
35-39	102	81,316	46,132	63,000	74,000	89,000
40 or more	74	84,616	38,358	62,400	75,120	98,000
Agricultural chemicals						
Total	441	61,700	19,788	50,000	57,956	68,220
5-9	36	45,782	3,078	43,650	45,550	47,592
10-14	104	50,146	6,188	46,650	50,200	54,000
15-19	93	58,114	11,886	52,000	57,000	61,200
20-24	75	62,242	13,927	53,000	60,180	68,150
25-29	66	72,457	18,702	62,000	69,078	76,000
30-34	32	76,608	17,425	63,650	73,450	85,738
35-39	21	77,983	18,117	67,843	72,000	86,690

Table 2.4.3 (Continued)

INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemical products						
Total	223	63,731	28,841	48,000	56,000	69,000
5-9	21	45,335	5,953	42,000	45,500	49,500
10-14	53	52,367	9,404	45,600	50,060	56,000
15-19	51	59,969	17,076	50,500	57,000	67,000
20-24	46	65,072	20,761	52,000	62,000	70,200
25-29	22	76,986	44,019	55,000	60,000	73,000
30-34	15	105,340	53,441	69,000	92,000	166,800
Coatings						
Total	282	60,809	19,090	48,000	57,000	69,600
5-9	27	50,667	26,385	44,000	45,900	48,500
10-14	65	50,669	6,225	46,200	49,800	56,000
15-19	46	55,129	10,556	48,300	55,000	62,000
20-24	48	66,358	16,400	55,200	65,550	74,000
25-29	36	70,514	16,899	59,500	68,850	77,500
30-34	34	72,115	18,525	64,000	71,250	81,000
35-39	18	64,958	18,562	50,000	63,436	70,000
Electronics						
Total	408	65,865	27,958	52,900	61,000	71,050
5-9	40	49,063	9,094	45,100	48,000	50,550
10-14	97	55,400	9,435	49,000	54,000	62,600
15-19	74	62,925	11,616	56,000	60,300	68,640
20-24	72	75,180	51,174	60,000	67,850	76,000
25-29	58	76,897	25,405	61,000	70,000	88,000
30-34	27	71,176	16,493	60,000	65,000	78,000
35-39	24	81,038	27,981	64,377	73,500	91,500
40 or more	16	71,271	20,153	56,750	67,100	84,500
Food						
Total	232	67,183	21,580	53,050	63,000	76,000
10-14	38	51,273	10,840	44,512	51,024	57,240
15-19	37	61,129	9,642	56,000	61,000	65,000
20-24	42	67,736	14,996	59,600	65,300	73,000
25-29	53	72,879	23,657	60,000	70,000	80,000
30-34	24	77,339	25,911	61,000	76,500	88,000
35-39	20	87,905	24,704	68,000	88,700	101,500
Glass						
Total	70	65,932	21,966	49,980	60,600	73,944
Paper						
Total	134	61,359	15,885	49,000	60,000	70,000
10-14	21	49,736	6,712	46,500	48,000	52,000
15-19	22	58,857	11,055	51,145	58,120	66,000
20-24	21	62,593	11,431	55,000	63,000	70,000
25-29	25	70,407	16,690	60,000	63,000	80,000
30-34	16	66,563	16,140	58,250	62,500	76,000
35-39	16	70,438	20,875	55,000	71,300	78,400
Petroleum						
Total	447	71,264	22,410	53,800	67,000	85,000
5-9	45	47,987	4,499	45,600	47,500	49,400
10-14	76	54,120	7,417	48,345	53,600	59,100
15-19	89	64,808	12,461	55,200	62,600	72,000
20-24	66	70,892	16,335	63,000	69,600	80,000
25-29	71	83,957	15,981	70,000	83,700	95,000
30-34	37	88,770	24,843	75,000	84,000	98,500
35-39	47	96,058	25,977	78,200	94,000	110,000
40 or more	16	85,978	27,402	69,200	89,070	99,200

Table 2.4.3 (Continued)

INDUSTRY & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pharmaceuticals						
Total	1772	66,203	25,048	51,300	60,000	74,000
5-9	213	48,337	5,154	45,000	48,000	51,500
10-14	463	55,147	9,881	49,400	54,000	60,000
15-19	349	61,511	13,099	54,000	60,000	66,500
20-24	270	72,753	33,113	59,960	69,000	80,200
25-29	212	80,885	23,654	65,000	78,000	90,000
30-34	117	84,229	33,886	62,000	78,000	95,000
35-39	102	89,291	30,974	68,080	84,000	100,000
40 or more	46	92,656	31,080	75,000	88,000	103,000
Plastics						
Total	571	65,901	22,193	51,000	62,000	73,700
5-9	66	47,696	2,760	45,900	48,000	49,500
10-14	110	52,866	9,362	47,500	51,000	57,000
15-19	78	61,104	8,813	54,100	61,250	66,000
20-24	94	67,542	14,408	57,000	66,000	75,000
25-29	96	75,515	22,937	62,200	71,490	85,000
30-34	46	81,467	25,892	63,500	75,000	92,280
35-39	50	83,866	39,109	64,800	75,500	100,000
40 or more	31	76,160	16,604	65,000	72,000	85,000
Rubber						
Total	103	63,554	17,103	52,000	60,200	70,000
15-19	16	56,675	7,869	51,750	55,150	63,000
20-24	15	58,078	10,824	50,480	59,400	64,560
25-29	18	63,307	9,338	58,000	60,970	68,000
30-34	18	75,145	19,001	62,700	68,275	84,900
Soaps						
Total	129	60,785	16,389	48,000	55,500	70,000
5-9	26	46,149	5,212	44,000	46,500	48,000
10-14	28	53,861	9,270	47,500	52,900	56,000
15-19	19	65,796	11,454	55,500	62,826	75,700
20-24	20	64,169	11,486	54,000	65,250	72,500
Steel or ferrous metals						
Total	15	50,953	11,328	42,000	50,400	60,000
Other metals, minerals						
Total	80	63,293	21,773	49,000	55,000	75,224
25-29	15	67,109	22,854	48,000	60,000	83,700
Other manufactures						
Total	1030	65,623	24,198	51,000	60,550	73,000
5-9	78	47,204	10,094	43,095	45,750	49,000
10-14	169	52,363	7,481	46,932	52,000	57,300
15-19	191	60,902	21,159	51,000	59,000	67,000
20-24	208	68,297	17,202	57,450	65,000	78,000
25-29	151	71,882	20,821	58,680	69,500	80,000
30-34	108	76,242	28,485	61,100	70,000	83,950
35-39	80	82,686	43,043	60,000	72,100	89,500
40 or more	45	78,207	26,244	65,000	75,000	90,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.4

SALARIES of PhD CHEMISTS employed FULL-TIME
by GEOGRAPHIC REGION and YEARS SINCE BS
1990 ACS Salary Survey

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific						
Total	1045	66,324	27,025	51,000	61,000	74,000
5-9	85	47,483	12,239	43,000	46,000	49,000
10-14	241	54,120	10,654	47,000	53,000	60,000
15-19	201	63,283	21,795	54,000	60,000	69,300
20-24	209	69,570	33,401	57,200	66,000	77,600
25-29	137	78,758	26,008	62,000	72,000	91,000
30-34	75	76,799	25,389	62,000	71,600	86,000
35-39	59	90,229	31,118	70,000	84,000	105,000
40 or more	38	81,471	39,524	58,000	72,386	90,000
Mountain						
Total	174	59,784	19,302	48,500	55,671	66,000
10-14	35	50,932	11,014	43,680	50,000	55,000
15-19	37	57,903	12,512	49,800	56,300	63,000
20-24	39	59,334	15,244	51,000	58,000	65,000
25-29	25	70,441	22,956	53,096	65,800	80,000
30-34	17	71,115	31,211	58,000	63,000	74,000
West North Central						
Total	484	62,995	22,467	48,000	58,000	71,550
5-9	47	44,783	4,287	42,125	45,500	47,700
10-14	110	51,144	9,441	45,200	49,740	56,040
15-19	104	59,079	14,528	50,000	56,530	64,250
20-24	68	66,961	18,599	56,000	62,400	73,250
25-29	75	74,520	26,610	58,000	70,000	83,000
30-34	40	80,373	25,652	65,100	76,110	92,000
35-39	21	78,627	23,547	60,000	79,000	93,160
40 or more	19	84,535	40,466	61,800	73,000	93,000
West South Central						
Total	659	64,965	19,507	50,100	60,000	75,000
5-9	83	46,783	5,567	44,500	46,000	50,000
10-14	113	52,006	7,432	47,000	50,340	57,000
15-19	131	61,635	12,680	52,400	60,000	67,600
20-24	93	66,306	13,032	59,000	65,000	73,000
25-29	106	76,351	18,933	63,000	71,990	84,500
30-34	65	80,709	24,795	60,804	75,500	95,000
35-39	54	80,113	22,677	66,000	79,480	92,500
East North Central						
Total	1847	63,421	21,912	50,000	59,000	72,000
5-9	178	46,326	4,712	43,500	46,057	49,000
10-14	376	52,105	8,579	47,000	51,000	55,200
15-19	336	58,874	10,747	52,000	57,120	65,000
20-24	313	67,175	15,250	56,000	65,400	75,000
25-29	283	72,527	22,117	60,000	70,000	80,800
30-34	177	75,439	24,754	60,000	70,000	85,000
35-39	129	80,277	43,363	60,000	72,000	89,000
40 or more	55	77,446	30,150	60,000	71,900	88,000

Table 2.4.4 (Continued)

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
East South Central						
Total	215	62,396	22,596	48,500	59,400	68,016
5-9	26	51,339	26,877	44,100	46,800	49,000
10-14	33	52,878	8,232	47,500	50,800	59,000
15-19	42	56,316	8,900	50,000	57,575	60,400
20-24	31	62,669	13,144	55,100	60,712	70,000
25-29	31	70,302	16,199	60,000	66,900	82,500
30-34	20	73,572	45,106	56,950	64,948	76,250
35-39	21	72,193	21,509	60,000	67,000	75,000
Middle Atlantic						
Total	2635	67,160	26,689	51,600	61,000	75,000
5-9	259	47,976	4,475	45,000	47,800	50,200
10-14	529	53,506	8,618	48,000	52,000	58,000
15-19	442	61,699	12,602	53,900	60,000	67,000
20-24	436	70,104	27,526	57,850	67,000	78,200
25-29	385	75,793	21,817	62,000	72,000	84,000
30-34	234	81,705	28,944	62,000	75,000	90,000
35-39	220	83,171	28,275	63,700	78,750	96,000
40 or more	129	91,120	59,895	66,000	80,000	100,000
South Atlantic						
Total	1396	64,051	23,349	50,000	59,510	71,000
5-9	142	46,308	4,549	43,500	45,950	49,000
10-14	283	52,157	9,062	46,800	51,000	56,100
15-19	247	57,963	9,648	51,500	57,275	63,000
20-24	219	65,201	15,229	56,000	62,800	73,300
25-29	217	75,227	25,569	60,300	69,000	84,000
30-34	110	78,301	23,046	63,000	72,950	88,800
35-39	115	83,943	42,295	64,100	72,000	93,000
40 or more	62	78,223	30,272	61,000	73,000	89,000
New England						
Total	682	66,473	22,511	52,000	60,550	75,000
5-9	64	47,562	6,444	45,000	48,400	50,850
10-14	133	53,722	9,839	48,000	52,000	58,300
15-19	117	60,809	10,276	54,000	60,000	67,000
20-24	121	70,522	20,795	57,000	65,000	80,000
25-29	94	79,442	26,350	61,200	75,000	90,000
30-34	71	78,765	30,096	61,000	75,000	87,600
35-39	54	76,995	22,088	58,000	73,650	86,460
40 or more	28	81,420	29,003	64,090	74,920	87,500

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.5

SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY
by SELECTED STATES and YEARS SINCE BS
1990 ACS Salary Survey

SELECTED STATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Alabama						
Total	41	55,360	14,965	44,500	50,500	63,000
Arizona						
Total	19	65,319	15,118	55,000	60,000	68,000
Arkansas						
Total	15	56,959	15,336	46,000	53,000	65,728
California						
Total	929	67,468	27,501	52,000	62,000	75,000
5-9	73	48,518	12,767	44,500	46,200	49,320
10-14	213	54,915	10,643	48,250	54,000	60,000
15-19	184	63,586	22,446	54,000	60,000	69,850
20-24	189	70,930	34,236	59,600	66,400	78,000
25-29	119	81,290	26,322	64,000	75,000	93,000
30-34	64	79,229	25,548	64,500	73,200	88,500
35-39	51	92,627	31,526	74,352	86,000	105,000
40 or more	36	79,591	36,650	59,000	72,386	88,320
Colorado						
Total	77	62,224	18,897	50,000	59,160	68,000
10-14	18	51,511	9,283	44,000	50,000	56,000
20-24	21	64,957	14,954	58,000	63,000	66,000
Connecticut						
Total	250	68,814	22,339	54,100	62,500	78,000
5-9	23	49,359	7,813	47,000	49,500	54,000
10-14	40	56,297	7,123	51,180	55,000	60,000
15-19	39	60,468	10,026	53,200	62,000	68,900
20-24	40	71,678	19,324	60,000	64,500	85,500
25-29	37	83,928	31,467	60,000	80,000	94,100
30-34	27	77,712	17,068	61,000	80,000	92,400
35-39	30	75,459	21,936	57,000	72,560	85,000
Delaware						
Total	505	67,555	23,582	53,000	62,100	75,000
5-9	43	46,771	2,996	44,000	47,020	48,600
10-14	101	54,374	7,932	48,000	54,000	58,000
15-19	80	58,313	8,129	53,450	57,538	62,100
20-24	77	67,861	16,278	58,000	67,500	76,500
25-29	77	79,771	23,968	63,000	72,000	91,000
30-34	48	82,740	24,705	67,600	76,740	91,140
35-39	52	88,109	39,404	68,740	77,625	96,500
40 or more	27	75,047	17,218	63,000	72,000	84,000
DC						
Total	21	64,256	21,370	48,000	63,000	67,000
Florida						
Total	69	59,654	16,934	46,300	56,000	67,500
10-14	17	51,935	11,327	44,200	48,000	55,000
15-19	20	60,315	14,262	50,171	59,020	67,040

Table 2.4.5 (Continued)

SELECTED STATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Georgia						
Total	94	65,995	29,015	50,700	60,060	72,000
10-14	16	53,176	12,947	48,100	51,700	60,000
15-19	16	58,288	10,082	50,000	57,000	64,050
20-24	17	65,101	14,065	60,000	61,300	64,000
25-29	19	68,521	25,327	54,000	60,000	80,000
Illinois						
Total	531	63,242	19,907	50,000	58,600	70,900
5-9	55	46,294	5,821	43,500	47,000	49,000
10-14	125	52,809	7,838	48,000	52,000	57,000
15-19	98	59,457	10,600	52,500	59,000	64,500
20-24	82	71,336	16,731	58,000	70,040	80,200
25-29	84	74,942	24,246	60,500	70,000	84,100
30-34	41	76,439	23,760	60,000	72,000	92,000
35-39	35	73,233	30,657	56,500	66,400	78,087
Indiana						
Total	194	62,665	21,336	50,000	58,100	71,220
5-9	20	45,210	4,193	42,850	44,250	47,600
10-14	32	51,559	6,801	47,254	50,300	54,000
15-19	44	58,877	10,215	52,220	59,500	64,700
20-24	29	65,817	11,842	58,500	65,000	72,000
25-29	36	65,689	17,987	55,000	71,500	76,000
30-34	16	77,265	30,367	53,380	69,500	96,740
Iowa						
Total	21	66,706	29,381	52,000	58,000	75,000
Kansas						
Total	34	56,847	17,113	45,000	55,100	65,000
Kentucky						
Total	50	62,535	16,919	48,500	60,000	73,400
Louisiana						
Total	122	67,888	20,363	51,200	65,250	78,400
10-14	22	52,931	7,436	48,000	51,100	54,000
15-19	20	63,630	15,454	53,500	63,850	70,000
20-24	20	69,131	12,829	60,000	66,200	76,900
25-29	17	78,271	15,618	68,000	76,800	83,400
Maryland						
Total	133	62,346	24,078	48,800	55,900	68,800
10-14	32	53,531	12,725	46,500	51,180	57,875
15-19	32	55,301	9,998	49,000	53,130	60,500
20-24	18	68,478	13,725	56,000	66,800	76,000
25-29	21	81,824	43,376	55,900	67,100	95,000
Massachusetts						
Total	384	65,118	22,699	50,000	60,000	74,350
5-9	37	46,586	5,528	45,000	48,000	50,000
10-14	86	52,327	10,347	47,000	50,750	58,000
15-19	70	60,587	10,840	53,352	59,000	65,730
20-24	73	71,627	21,907	57,000	66,000	80,000
25-29	47	78,041	22,589	64,000	74,500	88,500
30-34	39	78,413	35,734	61,000	72,000	87,600
35-39	20	78,355	22,512	61,000	80,000	88,000

Table 2.4.5 (Continued)

SELECTED STATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Michigan						
Total	424	63,820	19,613	50,008	59,250	73,550
5-9	51	46,894	3,627	45,000	46,500	49,700
10-14	102	53,421	11,301	48,000	51,000	56,000
15-19	69	58,449	10,167	52,000	57,000	65,000
20-24	66	70,489	14,514	60,000	70,100	78,910
25-29	47	77,822	22,508	65,000	73,500	85,000
30-34	47	71,827	13,908	60,000	72,000	80,000
35-39	23	83,124	28,760	61,700	78,000	100,000
40 or more	19	83,600	32,696	61,000	77,000	99,600
Minnesota						
Total	167	66,256	22,110	49,800	60,060	75,000
10-14	34	53,552	9,268	46,000	53,100	59,700
15-19	37	63,942	16,401	53,000	60,060	72,000
20-24	26	75,612	23,101	58,000	68,000	90,000
25-29	26	74,690	29,049	56,400	67,000	85,000
30-34	16	77,471	20,971	64,100	76,500	89,750
Missouri						
Total	248	61,349	21,812	47,450	56,000	69,800
5-9	31	44,489	4,953	42,125	45,000	48,000
10-14	58	50,385	9,037	45,200	49,750	55,000
15-19	50	56,513	9,633	51,000	56,000	60,000
20-24	33	61,312	13,804	50,400	58,440	67,000
25-29	34	74,940	22,419	60,000	71,500	82,000
30-34	20	79,809	22,873	67,000	76,110	92,000
New Hampshire						
Total	16	73,088	28,589	57,654	70,000	76,500
New Jersey						
Total	1182	69,758	32,445	52,680	62,026	78,000
5-9	114	48,615	4,003	46,000	48,000	52,000
10-14	230	54,330	8,491	49,000	53,000	58,600
15-19	220	63,254	13,239	55,000	61,000	68,600
20-24	195	73,095	37,444	59,960	68,400	80,000
25-29	170	78,304	23,339	62,000	72,250	85,500
30-34	97	86,168	33,623	66,000	76,000	95,000
35-39	99	86,456	25,029	70,000	84,000	102,000
40 or more	57	105,570	84,106	67,200	84,216	105,000
New Mexico						
Total	20	61,169	19,758	49,000	57,150	72,000
New York						
Total	705	67,506	22,233	52,000	62,000	77,000
5-9	52	48,185	5,562	46,000	48,000	50,000
10-14	137	52,718	6,784	48,000	52,000	56,300
15-19	105	61,628	11,306	55,000	60,000	66,000
20-24	120	68,967	14,861	58,000	68,000	78,250
25-29	109	74,489	20,987	62,500	72,600	86,000
30-34	75	78,607	25,347	60,000	73,210	89,000
35-39	66	86,438	35,043	63,000	79,000	94,500
40 or more	40	83,719	24,437	66,900	80,893	95,750

Table 2.4.5 (Continued)

SELECTED STATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
North Carolina						
Total	275	61,829	25,890	48,600	57,000	70,000
5-9	40	47,021	5,998	42,500	45,950	51,200
10-14	58	50,905	8,058	45,000	50,650	55,000
15-19	48	58,667	10,379	50,806	57,793	66,250
20-24	52	63,402	17,203	53,150	59,750	71,250
25-29	37	70,328	15,350	60,300	68,900	76,000
30-34	19	72,382	21,718	58,812	70,000	86,975
35-39	15	105,273	78,737	68,000	78,000	112,800
Ohio						
Total	589	63,343	23,329	50,000	60,000	72,000
5-9	44	46,616	4,701	43,350	47,050	49,350
10-14	103	50,657	6,536	46,200	50,000	53,580
15-19	101	59,235	11,437	52,000	57,000	65,000
20-24	107	64,297	14,144	54,000	63,000	74,000
25-29	107	70,073	17,707	58,800	66,800	79,500
30-34	62	73,626	20,016	60,648	69,500	85,000
35-39	49	82,202	57,338	65,000	73,500	87,000
40 or more	16	67,943	18,427	55,900	69,800	81,498
Oklahoma						
Total	91	65,861	17,757	51,000	64,000	80,000
15-19	18	58,211	6,510	53,600	56,300	64,140
25-29	19	78,430	12,948	68,000	79,000	84,500
Oregon						
Total	37	55,193	17,977	44,800	52,200	63,600
Pennsylvania						
Total	748	62,728	18,736	50,000	59,325	70,250
5-9	93	47,075	4,241	44,460	46,500	50,000
10-14	162	53,002	10,019	47,000	51,000	58,000
15-19	117	58,840	12,059	50,800	58,000	64,500
20-24	121	66,411	15,212	55,365	64,225	73,000
25-29	106	73,107	19,792	62,000	71,000	80,000
30-34	62	78,471	24,236	62,000	69,538	90,000
35-39	55	73,339	22,272	60,000	70,200	82,500
40 or more	32	74,633	23,400	59,000	71,500	84,000
South Carolina						
Total	108	61,558	20,927	50,000	58,260	65,850
10-14	16	48,420	3,683	45,750	49,500	51,300
15-19	16	57,420	6,969	55,150	58,760	61,250
20-24	16	57,836	8,929	56,500	60,000	62,350
25-29	19	77,509	38,574	58,600	64,000	84,800
Tennessee						
Total	118	65,353	26,493	51,500	60,000	70,000
10-14	15	56,156	8,254	50,600	56,200	60,000
15-19	24	56,871	9,293	50,000	57,854	61,250
20-24	20	62,903	14,653	54,550	60,356	70,000
25-29	19	72,785	15,008	64,320	67,400	84,000

Table 2.4.5 (Continued)

SELECTED STATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Texas						
Total	431	64,227	19,662	50,050	60,000	72,000
5-9	56	47,517	5,531	44,600	47,000	50,700
10-14	74	51,999	7,346	47,000	50,470	57,500
15-19	93	61,869	12,916	52,000	60,000	68,600
20-24	62	65,280	12,720	59,000	64,330	72,600
25-29	66	76,060	21,350	60,000	71,000	87,000
30-34	43	77,641	25,048	58,200	72,000	92,000
35-39	30	81,948	26,326	60,800	82,250	100,000
Utah						
Total	30	52,645	13,071	43,888	50,200	62,000
Virginia						
Total	104	64,239	18,845	53,000	60,250	71,250
10-14	19	51,120	8,338	44,950	52,600	57,000
15-19	17	60,302	10,713	53,040	60,500	65,000
20-24	15	65,511	16,673	57,000	70,000	75,000
25-29	17	72,069	13,269	65,000	69,500	79,600
Washington						
Total	77	58,152	22,250	45,000	52,000	64,500
10-14	18	47,733	7,002	43,000	46,250	52,000
West Virginia						
Total	87	57,553	13,517	47,000	55,260	64,000
10-14	21	46,617	4,066	45,000	46,900	48,720
Wisconsin						
Total	109	64,505	31,240	48,000	57,000	66,780
15-19	24	56,198	11,352	50,000	54,500	64,600
20-24	29	59,845	15,140	53,000	58,000	65,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.6

SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY
by SELECTED METROPOLITAN AREAS and YEARS SINCE BS
1990 ACS Salary Survey

METROPOLITAN AREAS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Atlanta						
Total	60	65,494	20,149	52,000	61,700	74,620
Baltimore						
Total	72	62,672	19,839	49,543	57,800	69,400
10-14	18	55,419	15,459	47,000	52,000	60,000
15-19	15	55,937	10,729	48,300	54,500	63,250
Boston						
Total	315	64,710	23,821	50,000	59,000	72,150
5-9	36	46,464	5,555	44,700	48,000	49,950
10-14	70	52,823	11,164	47,000	52,000	58,000
15-19	61	60,339	10,963	53,000	59,000	65,000
20-24	59	71,498	23,151	57,000	65,800	80,000
25-29	35	79,718	24,562	64,000	74,500	88,500
30-34	28	79,054	41,334	58,800	70,500	86,300
Chicago						
Total	499	63,609	20,140	50,000	59,000	71,700
5-9	54	46,170	5,849	43,500	47,000	49,000
10-14	118	53,049	7,605	48,000	52,250	57,000
15-19	94	59,696	10,464	52,500	59,100	64,400
20-24	77	71,884	16,713	59,000	70,400	80,200
25-29	76	75,996	24,917	61,250	71,000	85,000
30-34	40	77,000	23,786	60,000	72,000	93,000
35-39	31	75,279	31,968	58,000	68,000	82,100
Cincinnati						
Total	204	63,598	17,244	51,392	60,000	74,000
5-9	22	47,695	4,727	45,100	48,000	49,200
10-14	39	51,351	6,215	48,000	52,000	54,500
15-19	46	61,884	11,393	55,000	60,600	67,500
20-24	29	66,658	17,720	54,600	65,000	75,000
25-29	31	74,240	14,888	64,860	73,000	85,000
30-34	22	75,478	25,319	60,000	72,250	86,000
Cleveland-Akron						
Total	120	65,334	39,883	48,450	58,500	70,280
10-14	18	48,177	5,374	46,080	48,000	50,000
15-19	18	54,180	9,691	50,000	52,000	55,000
20-24	22	62,588	11,846	56,000	61,194	70,000
25-29	30	70,122	23,918	54,000	62,870	82,000
Columbus						
Total	78	63,502	14,748	53,004	61,430	72,000
20-24	15	63,347	11,805	54,000	63,500	73,000
Dallas						
Total	65	62,182	18,805	52,000	59,000	68,600
Dayton						
Total	34	60,470	18,404	48,000	58,398	70,000
Denver						
Total	27	64,516	25,794	45,000	58,000	75,000

Table 2.4.6 (Continued)

METROPOLITAN AREAS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Detroit						
Total	157	65,716	19,210	51,000	61,000	77,200
10-14	37	53,901	12,515	46,500	51,000	58,000
15-19	28	60,982	11,023	52,000	60,000	68,350
20-24	33	76,756	14,597	68,000	76,700	85,000
25-29	16	73,001	20,443	57,540	69,200	81,750
30-34	15	71,154	12,043	62,000	72,000	81,350
Houston-Beaumont						
Total	266	66,303	20,876	51,300	60,650	75,500
5-9	31	47,181	5,861	44,400	47,500	50,000
10-14	43	53,139	7,082	47,000	51,900	58,000
15-19	57	62,062	13,413	52,000	59,500	70,000
20-24	36	65,488	10,261	60,000	65,030	72,500
25-29	44	79,341	19,973	64,000	75,600	93,500
30-34	29	77,872	27,430	57,072	73,000	101,000
35-39	19	88,936	28,110	66,000	88,000	109,000
Los Angeles						
Total	240	67,612	24,599	52,172	63,340	75,000
10-14	48	52,914	7,920	46,500	52,500	57,835
15-19	40	60,210	14,358	52,524	56,840	68,000
20-24	45	66,583	16,326	60,984	65,300	76,000
25-29	39	78,649	18,976	66,000	73,000	91,600
30-34	22	75,747	28,032	62,000	69,075	84,000
35-39	18	95,732	35,852	75,000	84,100	107,000
Newark						
Total	568	71,101	31,071	54,160	64,112	80,000
5-9	55	49,119	4,167	46,000	48,500	52,000
10-14	115	55,660	9,691	49,750	54,800	60,000
15-19	101	64,640	14,628	57,000	63,000	70,000
20-24	83	71,603	16,554	60,000	68,220	83,700
25-29	82	81,260	23,125	66,000	76,250	86,592
30-34	50	83,979	32,569	62,000	76,500	90,000
35-39	51	90,208	25,763	73,000	88,908	104,000
40 or more	31	108,016	87,092	67,200	91,452	113,200
New York						
Total	124	75,772	29,765	53,750	69,400	89,875
10-14	18	55,339	9,792	50,000	54,000	60,000
15-19	19	63,071	13,202	55,000	59,000	69,900
20-24	20	74,914	20,237	65,900	69,750	86,000
25-29	28	80,693	29,135	69,000	76,000	102,500
Philadelphia						
Total	431	63,982	17,160	51,000	60,400	72,000
5-9	49	48,806	3,820	46,000	48,000	51,000
10-14	103	55,145	10,623	48,300	53,000	60,000
15-19	70	61,401	9,876	55,000	60,000	65,100
20-24	73	67,680	16,197	55,000	65,676	73,500
25-29	55	73,580	14,601	63,600	72,000	80,000
30-34	39	80,347	24,553	65,000	76,200	90,000
35-39	28	71,881	17,626	60,100	72,600	82,350

Table 2.4.6 (Continued)

METROPOLITAN AREAS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pittsburgh						
Total	145	61,868	23,611	48,000	56,000	70,000
5-9	20	43,544	3,679	42,000	43,350	45,000
10-14	28	47,616	6,006	44,100	47,900	49,600
15-19	18	54,033	11,928	49,000	50,700	60,500
20-24	18	66,186	14,089	55,600	62,200	70,000
25-29	22	76,165	33,819	60,000	71,800	82,150
35-39	16	79,275	31,267	60,000	69,500	83,750
St. Louis						
Total	215	62,093	21,502	48,000	56,100	71,000
5-9	24	44,299	5,052	41,813	45,250	47,500
10-14	51	50,744	8,443	45,500	49,500	55,200
15-19	47	57,215	9,382	51,256	56,000	60,500
20-24	29	61,859	14,339	54,000	58,440	68,000
25-29	29	76,712	21,735	60,000	71,000	82,000
30-34	18	81,232	23,711	72,000	78,610	92,000
San Francisco						
Total	548	68,557	29,609	53,000	62,590	77,000
5-9	42	47,263	5,259	45,000	47,000	50,000
10-14	130	56,330	11,637	50,000	55,150	60,000
15-19	121	65,164	25,722	55,000	61,000	70,000
20-24	115	73,102	41,510	59,600	67,100	79,500
25-29	62	84,175	27,326	65,900	80,000	100,000
30-34	37	82,111	25,235	67,200	77,000	100,000
35-39	25	90,113	27,612	70,000	86,000	100,000
40 or more	16	91,235	30,920	72,500	84,820	105,600
Washington, DC						
Total	81	64,148	27,317	48,800	58,150	71,000
10-14	16	50,931	6,145	46,790	48,900	57,575
15-19	19	55,826	10,732	48,500	52,000	66,000
25-29	15	82,107	47,521	58,406	65,000	80,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.7

SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY
by SUPERVISORY STATUS and YEARS SINCE BS
1990 ACS Salary Survey

SUPERVISORY STATUS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Non-supervisors						
Total	3503	56,036	15,672	47,000	53,000	62,000
5-9	580	45,987	4,556	43,550	46,000	48,500
10-14	865	49,574	6,998	45,400	49,500	53,000
15-19	568	55,157	9,372	49,000	55,000	60,360
20-24	480	60,051	24,843	51,425	58,040	66,170
25-29	383	63,337	13,127	55,000	62,000	71,000
30-34	258	65,963	15,678	56,820	65,000	75,000
35-39	237	69,203	19,511	56,000	65,000	78,960
40 or more	131	67,630	16,185	58,680	66,200	74,320
Supervisors						
Total	5372	71,060	26,721	55,200	65,000	80,000
5-9	295	49,153	10,971	45,000	48,000	51,000
10-14	946	55,736	9,808	49,500	55,000	60,000
15-19	1047	63,209	14,431	55,000	60,400	69,000
20-24	999	71,924	21,054	60,000	69,400	80,000
25-29	939	80,578	24,913	65,000	75,000	90,000
30-34	524	85,152	29,128	66,550	79,200	95,000
35-39	415	88,902	37,532	68,000	82,500	100,000
40 or more	206	93,472	53,416	70,000	84,000	101,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.4.8

SALARIES of PhD CHEMISTS employed FULL-TIME
by TOTAL SUBORDINATES and YEARS SINCE BS
1990 ACS Salary Survey

TOTAL SUBORDINATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
None						
Total	1744	56,213	19,698	46,000	52,000	62,000
5-9	282	45,531	4,939	43,000	45,600	48,000
10-14	399	48,953	7,920	45,000	48,562	52,000
15-19	286	53,599	10,061	47,000	52,441	60,000
20-24	218	60,605	35,057	50,000	56,000	65,300
25-29	207	63,714	16,656	54,000	61,000	71,500
30-34	149	67,738	19,176	56,400	66,000	76,000
35-39	123	68,678	25,716	55,000	63,000	76,000
40 or more	79	67,660	21,596	56,000	65,000	74,320
1-2						
Total	3163	58,024	13,695	48,900	55,100	64,653
5-9	472	47,230	4,414	44,700	47,124	50,000
10-14	796	51,541	6,973	47,000	51,000	55,000
15-19	565	57,146	8,522	52,000	56,800	61,000
20-24	462	61,195	11,083	54,000	60,140	67,100
25-29	342	66,203	13,649	57,500	65,000	73,000
30-34	214	68,566	20,273	57,900	65,000	75,000
35-39	215	72,251	17,740	60,000	70,300	80,000
40 or more	96	70,432	17,925	59,550	70,000	78,300
3-9						
Total	2394	64,150	16,496	53,004	61,450	72,000
5-9	135	47,581	6,468	44,700	47,500	51,000
10-14	505	54,433	9,382	48,400	54,000	59,300
15-19	516	60,733	10,200	54,000	60,000	66,000
20-24	436	66,468	13,449	58,000	65,000	73,950
25-29	349	71,413	15,986	62,000	70,000	79,200
30-34	214	73,543	18,124	62,000	71,000	84,000
35-39	148	77,283	21,754	63,000	73,450	92,608
40 or more	91	79,616	26,418	64,900	77,000	93,000
10-14						
Total	527	71,435	15,058	60,000	70,000	80,000
10-14	79	60,556	9,754	55,000	60,000	65,000
15-19	120	66,324	11,861	57,806	65,000	74,400
20-24	115	71,302	12,315	63,200	70,400	77,500
25-29	100	75,722	13,977	65,000	72,500	85,000
30-34	41	79,709	16,893	68,400	80,000	89,500
35-39	44	85,234	15,385	73,500	85,000	95,200
40 or more	19	83,605	15,127	70,000	83,000	94,000

Table 2.4.8 (Continued)

TOTAL SUBORDINATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
15-29						
Total	633	78,837	27,325	65,900	75,000	87,054
10-14	65	65,219	11,989	58,000	65,000	70,000
15-19	108	71,850	24,230	61,900	69,150	77,420
20-24	153	76,609	14,470	67,800	75,000	86,000
25-29	152	82,495	23,752	72,000	80,000	91,000
30-34	75	82,097	15,099	72,000	82,000	92,000
35-39	49	84,664	17,440	70,200	85,000	94,000
40 or more	27	112,345	84,156	76,000	90,000	105,000
30-49						
Total	279	87,126	21,896	73,000	84,500	100,000
15-19	40	80,423	23,724	68,300	78,500	87,500
20-24	70	81,806	16,159	72,000	80,000	90,000
25-29	75	89,920	19,623	75,000	86,000	101,000
30-34	39	95,033	21,441	83,000	93,000	104,000
35-39	29	93,907	31,001	73,500	89,000	112,800
40 or more	16	91,106	19,364	81,150	88,500	104,000
50-99						
Total	267	98,391	34,717	81,000	96,000	110,000
15-19	24	79,294	15,034	67,500	75,900	86,500
20-24	50	89,974	23,856	75,000	88,150	105,000
25-29	81	96,726	21,002	83,700	95,000	110,000
30-34	41	107,604	27,076	89,000	100,100	124,000
35-39	44	110,827	20,592	96,950	107,000	124,500
40 or more	16	128,325	100,457	95,000	106,500	120,500
100 or more						
Total	211	128,631	56,707	95,000	115,000	148,000
20-24	37	110,260	65,205	90,000	100,000	110,000
25-29	59	127,298	38,761	100,000	121,000	150,000
30-34	48	132,694	42,221	99,000	124,500	162,500
35-39	37	149,142	79,171	110,000	130,000	148,000
40 or more	17	157,500	51,863	120,000	160,000	180,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.5.1

SALARIES of CHEMISTS employed FULL-TIME in BASIC CHEMICALS
by DEGREE, SUPERVISORY STATUS, and YEARS SINCE BS
1990 ACS Salary Survey

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS						
Nonsupervisors						
Total	123	43,234	14,307	32,500	40,000	51,000
2-4	19	29,297	3,987	27,300	30,000	32,500
5-9	18	33,615	5,087	31,400	34,000	36,000
10-14	23	41,877	7,718	34,000	42,000	50,000
20-24	15	53,433	12,138	45,000	50,948	64,500
Supervisors						
Total	78	60,553	24,901	45,000	54,000	70,000
20-24	15	59,227	10,302	50,000	60,000	68,000
MS						
Nonsupervisors						
Total	96	47,897	13,347	36,500	45,780	55,000
5-9	17	34,544	3,735	31,800	34,000	35,300
Supervisors						
Total	72	58,151	17,588	45,030	53,500	69,740
PhD						
Nonsupervisors						
Total	357	58,286	14,054	48,048	55,050	65,000
5-9	59	46,275	3,127	44,700	45,700	47,500
10-14	76	50,903	5,976	46,790	50,000	54,500
15-19	69	55,616	6,481	51,060	55,000	60,000
20-24	48	63,410	12,937	56,500	63,860	73,500
25-29	31	64,112	12,583	58,700	65,000	71,000
30-34	27	69,621	12,979	60,000	68,100	76,000
35-39	39	73,875	18,019	60,000	74,000	82,000
Supervisors						
Total	328	72,442	24,004	56,760	66,800	80,000
5-9	19	48,354	4,641	45,600	48,000	49,560
10-14	47	53,589	6,721	48,000	53,000	58,300
15-19	60	59,330	8,847	52,470	58,250	64,750
20-24	55	73,484	14,216	64,200	70,400	80,000
25-29	68	87,374	28,077	70,750	80,300	95,500
30-34	35	87,926	20,523	72,900	83,500	100,000
35-39	29	84,595	28,178	66,000	72,000	85,000
40 or more	15	83,325	30,854	60,000	78,000	99,600

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.5.2

SALARIES of CHEMISTS employed FULL-TIME in SPECIALTY CHEMICALS
by DEGREE, SUPERVISORY STATUS, and YEARS SINCE BS
1990 ACS Salary Survey

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS						
Nonsupervisors						
Total	455	37,562	11,981	29,301	34,990	43,200
0-1	17	28,998	9,854	23,875	24,090	31,000
2-4	92	28,834	5,132	25,000	28,560	32,000
5-9	114	34,425	7,051	29,200	34,000	40,000
10-14	72	37,682	9,196	32,350	36,000	41,250
15-19	58	38,833	8,962	32,820	36,600	45,000
20-24	26	45,585	10,892	36,000	43,400	54,000
25-29	29	51,095	17,708	36,600	50,300	61,000
30-34	18	52,313	10,395	45,000	52,150	60,000
35-39	23	50,190	14,400	44,000	49,700	60,540
Supervisors						
Total	337	53,876	20,311	39,000	50,000	63,600
2-4	18	33,093	6,260	28,000	33,975	36,000
5-9	51	39,080	8,228	34,500	37,000	42,000
10-14	62	46,508	10,444	39,000	43,500	52,140
15-19	54	55,721	19,031	42,000	53,028	63,000
20-24	45	63,172	26,472	48,000	57,000	70,000
25-29	37	61,202	18,356	50,400	61,000	71,196
30-34	32	67,990	18,632	51,150	64,900	80,000
35-39	25	64,621	22,081	55,000	62,000	70,500
MS						
Nonsupervisors						
Total	212	45,694	12,080	37,600	43,835	52,000
5-9	33	36,512	5,281	34,000	36,000	39,200
10-14	41	42,253	8,553	37,500	42,200	45,000
15-19	36	46,385	9,889	39,245	46,650	53,950
20-24	29	49,403	11,797	41,760	50,000	56,000
30-34	18	48,923	12,981	39,000	50,000	52,000
35-39	20	57,314	16,900	47,160	54,000	67,440
Supervisors						
Total	229	58,582	18,471	47,400	55,000	65,000
5-9	20	41,716	7,475	35,650	42,000	47,800
10-14	42	47,955	8,589	42,000	48,450	52,900
15-19	44	57,365	13,333	48,750	55,000	62,000
20-24	38	59,855	13,450	51,000	60,000	65,500
25-29	31	65,032	23,452	52,000	59,800	71,500
30-34	21	71,090	20,390	57,200	67,000	78,000
35-39	20	73,583	25,437	58,250	67,650	85,000

Table 2.5.2 (Continued)

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
PhD						
Nonsupervisors						
Total	539	54,048	11,496	46,800	51,000	60,000
5-9	86	46,088	4,910	44,300	46,200	48,000
10-14	153	48,291	6,249	45,000	48,180	52,000
15-19	74	52,611	7,176	48,000	51,000	57,480
20-24	64	58,030	10,784	50,000	57,000	64,613
25-29	66	62,284	13,609	53,000	61,000	67,000
30-34	37	63,119	11,368	56,000	60,000	70,000
35-39	34	61,817	11,400	56,000	62,000	67,700
40 or more	25	64,992	16,834	58,140	63,000	73,000
Supervisors						
Total	950	70,407	27,264	55,000	64,500	79,462
5-9	54	47,197	4,255	44,400	46,325	50,500
10-14	139	54,085	8,947	48,700	52,700	58,000
15-19	172	62,534	11,440	55,000	60,000	66,718
20-24	175	69,498	15,935	58,500	65,728	79,000
25-29	190	79,699	26,906	64,250	73,600	85,000
30-34	114	78,459	24,573	60,000	72,000	90,000
35-39	59	92,401	57,159	70,000	85,000	96,000
40 or more	46	93,930	41,319	70,000	84,250	105,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.5.3

SALARIES of CHEMISTS employed FULL-TIME in COATINGS
by DEGREE, SUPERVISORY STATUS, and YEARS SINCE BS
1990 ACS Salary Survey

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
'S						
Nonsupervisors						
Total	183	37,351	10,999	29,500	35,800	42,500
2-4	39	28,451	4,667	26,000	28,500	33,000
5-9	43	34,847	6,197	31,408	34,824	40,000
10-14	34	38,540	6,988	34,000	38,300	44,000
15-19	15	42,350	12,618	31,700	44,000	52,000
25-29	15	43,307	10,111	39,500	42,000	50,000
Supervisors						
Total	163	53,119	36,131	40,000	47,800	59,566
5-9	31	37,718	6,214	32,600	37,800	41,262
10-14	22	43,427	6,056	41,000	43,000	47,800
15-19	26	49,882	13,660	40,000	48,200	53,500
20-24	18	57,572	16,372	50,000	56,750	68,000
25-29	18	54,906	13,931	42,000	55,500	63,000
30-34	17	58,964	15,815	45,000	55,000	66,000
35-39	15	64,288	12,001	55,000	64,500	75,000
MS						
Nonsupervisors						
Total	79	43,163	10,729	35,500	43,000	50,000
5-9	21	35,325	5,786	32,500	35,064	37,040
10-14	15	42,273	5,940	39,200	43,000	45,000
15-19	16	48,691	9,048	40,000	50,000	52,500
Supervisors						
Total	85	53,724	13,407	45,000	50,000	62,000
10-14	19	49,084	7,262	44,000	49,000	55,000
15-19	17	55,545	14,208	47,300	50,000	61,000
PhD						
Nonsupervisors						
Total	115	52,972	12,467	45,000	49,000	60,000
5-9	21	45,167	2,654	44,000	45,600	47,000
10-14	27	47,264	4,186	45,000	46,600	50,600
15-19	20	51,592	10,929	47,250	50,500	57,080
20-24	15	57,175	12,997	44,000	59,000	66,000
25-29	15	63,088	11,222	54,000	62,700	70,000
Supervisors						
Total	153	66,623	21,473	53,700	62,800	72,240
10-14	37	53,037	6,423	48,120	53,000	57,330
15-19	24	58,562	9,450	52,500	59,020	66,550
20-24	32	71,017	16,251	61,650	69,650	77,500
25-29	19	77,115	18,972	64,000	74,000	85,500
30-34	21	75,310	18,552	64,000	72,000	80,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.5.4

SALARIES of CHEMISTS employed FULL-TIME in PHARMACEUTICALS
by DEGREE, SUPERVISORY STATUS, and YEARS SINCE BS
1990 ACS Salary Survey

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS						
Nonsupervisors						
Total	645	36,210	8,891	30,000	34,500	40,150
0-1	38	28,441	3,800	26,100	28,350	30,876
2-4	164	30,141	3,689	28,000	30,000	32,500
5-9	191	34,013	5,378	31,000	34,100	38,000
10-14	110	38,884	6,021	35,200	38,850	43,800
15-19	50	41,243	7,099	38,000	42,200	47,000
20-24	31	44,153	9,001	37,600	43,900	48,136
25-29	30	51,509	11,182	43,000	51,000	60,000
30-34	19	52,278	10,200	44,300	52,000	61,000
Supervisors						
Total	284	51,965	20,255	40,000	48,800	60,000
2-4	16	32,456	6,893	27,500	31,800	37,300
5-9	39	36,540	7,303	31,000	37,008	40,500
10-14	67	47,638	12,529	40,000	45,000	55,000
15-19	53	49,881	11,315	43,000	47,585	57,000
20-24	29	59,139	14,019	50,000	55,000	67,000
25-29	30	59,076	17,277	49,000	56,050	60,000
30-34	24	74,557	39,750	56,350	64,500	82,375
MS						
Nonsupervisors						
Total	471	41,942	9,746	35,100	40,000	47,000
2-4	26	32,404	3,807	31,000	33,000	34,500
5-9	137	35,754	4,645	32,600	36,000	38,400
10-14	118	39,878	6,352	36,180	39,884	43,000
15-19	69	45,392	7,896	41,600	45,000	50,160
20-24	39	49,197	8,683	41,300	48,100	56,000
25-29	41	51,438	8,772	45,000	49,650	55,000
30-34	19	49,129	10,505	42,000	50,800	55,000
35-39	15	54,376	15,820	44,000	51,000	63,000
Supervisors						
Total	278	58,000	18,472	45,000	55,000	67,000
5-9	23	39,008	7,465	34,000	37,000	45,000
10-14	52	49,004	10,808	42,350	46,250	52,400
15-19	66	53,475	12,844	43,000	52,500	60,000
20-24	56	63,885	20,191	49,668	60,500	72,250
25-29	32	65,485	15,637	55,000	60,650	74,375
30-34	23	76,100	26,378	59,000	70,000	94,000
35-39	17	67,537	12,869	55,000	75,000	78,600

Table 2.5.4 (Continued)

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
PhD						
Nonsupervisors						
Total	497	54,623	24,938	46,100	50,500	58,000
5-9	123	46,708	4,219	43,500	47,100	50,000
10-14	157	49,413	5,907	45,846	50,000	52,000
15-19	71	54,544	10,811	47,500	54,900	60,900
20-24	54	66,733	66,000	51,000	56,250	63,600
25-29	34	66,096	15,323	55,000	66,500	80,000
30-34	31	68,818	21,538	54,000	62,000	77,000
35-39	21	66,199	16,061	59,700	64,000	76,384
Supervisors						
Total	1215	70,850	23,150	55,700	65,000	80,000
5-9	84	50,700	5,590	48,000	50,850	53,250
10-14	299	58,166	10,297	52,188	57,000	62,000
15-19	263	63,596	13,132	56,000	60,000	68,000
20-24	203	74,740	16,902	63,000	71,220	84,000
25-29	175	84,159	23,857	68,400	80,000	97,100
30-34	80	91,809	35,538	70,000	84,250	100,000
35-39	74	94,182	28,170	75,000	88,754	105,000
40 or more	37	94,383	29,217	79,500	91,452	103,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 2.5.5

SALARIES of CHEMISTS employed FULL-TIME in PLASTICS
by DEGREE, SUPERVISORY STATUS, and YEARS SINCE BS
1990 ACS Salary Survey

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS						
Nonsupervisors						
Total	117	39,557	13,677	29,000	36,600	49,500
5-9	41	34,383	7,860	28,680	32,000	39,600
10-14	19	35,677	11,747	28,000	34,900	43,560
Supervisors						
Total	125	55,273	20,591	40,000	49,260	70,000
10-14	23	45,819	15,140	36,000	42,900	51,000
15-19	19	53,624	15,753	44,000	49,000	70,000
20-24	18	53,518	15,451	39,000	53,000	66,000
35-39	16	69,470	25,395	49,458	62,400	80,100
MS						
Nonsupervisors						
Total	72	48,874	13,339	39,600	45,000	56,135
5-9	16	37,910	6,288	33,750	37,000	41,690
Supervisors						
Total	96	57,825	20,422	45,500	55,000	62,646
10-14	17	47,203	7,437	41,000	48,000	52,600
15-19	17	59,000	9,993	53,000	59,700	66,000
PhD						
Nonsupervisors						
Total	247	58,525	13,534	48,500	55,000	67,100
5-9	43	47,811	2,536	46,000	48,000	50,000
10-14	55	49,807	5,289	45,900	49,000	53,580
15-19	27	57,896	7,943	52,000	57,500	64,800
20-24	36	63,110	10,869	54,400	61,876	70,500
25-29	34	64,901	12,165	59,000	67,750	72,170
30-34	12	64,567	9,178	58,500	62,850	72,500
35-39	23	71,890	23,063	61,000	70,000	84,000
40 or more	17	70,015	10,995	63,000	70,000	78,000
Supervisors						
Total	298	72,130	26,118	56,000	66,000	79,920
5-9	19	47,494	2,841	45,000	47,880	49,000
10-14	49	55,936	11,826	48,500	54,000	60,000
15-19	47	63,307	8,936	56,000	63,500	69,500
20-24	57	70,544	15,707	62,000	70,000	77,400
25-29	57	81,468	25,673	64,000	75,000	94,000
30-34	31	87,892	28,494	68,100	88,000	101,000
35-39	26	94,608	47,721	65,000	88,750	106,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 3.1.1

SALARIES of GOVERNMENTAL CHEMISTS employed FULL-TIME
by DEGREE and YEARS SINCE BS
1990 ACS Salary Survey

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS						
Total	789	39,243	12,028	30,000	37,872	46,500
2-4	74	25,820	5,219	21,880	25,185	29,000
5-9	150	31,512	6,573	27,000	30,448	35,904
10-14	125	36,220	7,335	30,948	36,000	40,600
15-19	129	40,864	9,283	34,000	40,200	47,572
20-24	94	44,651	10,942	37,000	43,500	49,701
25-29	90	47,306	12,038	38,000	46,931	55,381
30-34	45	49,548	10,622	43,000	52,353	56,000
35-39	43	48,212	11,957	38,800	46,530	55,200
40 or more	29	51,642	14,322	43,700	50,000	62,000
MS						
Total	573	43,917	12,840	35,000	43,000	51,000
5-9	78	32,753	8,347	27,745	32,693	37,000
10-14	83	37,025	7,607	30,887	37,019	42,601
15-19	99	42,159	8,526	36,000	42,989	48,000
20-24	102	46,560	10,879	37,859	46,931	53,000
25-29	68	49,404	11,069	41,500	48,687	55,160
30-34	63	51,969	14,063	39,500	50,000	60,000
35-39	51	49,122	14,391	37,500	46,571	58,732
40 or more	22	58,512	15,865	48,000	57,700	69,086
PhD						
Total	1443	56,063	14,295	45,440	55,000	65,444
5-9	75	41,515	9,025	35,800	42,000	45,500
10-14	186	46,189	9,725	40,000	45,000	52,200
15-19	179	49,885	11,808	41,100	48,300	58,000
20-24	246	55,627	13,035	47,000	55,000	63,000
25-29	294	58,553	12,184	50,000	57,480	67,500
30-34	190	62,094	14,908	52,000	62,000	72,000
35-39	149	63,756	14,631	55,000	65,444	75,000
40 or more	123	65,311	12,180	56,000	65,400	76,400

Note: Cells with fewer than 15 cases have been suppressed.

Table 3.2.1

SALARIES of BS GOVERNMENTAL CHEMISTS employed FULL-TIME
by WORK FUNCTION and YEARS SINCE BS
1990 ACS Salary Survey

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
R&D Mgt						
Total	23	56,284	11,145	48,000	60,000	65,400
Basic research						
Total	66	39,270	12,327	30,000	38,650	47,136
Applied research						
Total	90	42,906	12,724	35,000	42,000	51,200
General Mgt						
Total	109	46,484	13,162	37,350	47,000	55,000
10-14	17	40,127	7,738	36,000	40,000	43,000
15-19	23	44,675	8,492	40,000	43,863	49,567
25-29	20	55,118	12,008	49,500	53,500	62,090
Production						
Total	63	35,531	11,157	28,000	35,755	40,500
15-19	15	36,709	8,434	32,000	35,000	40,000
Health & Safety						
Total	145	37,013	10,907	29,000	36,200	42,601
5-9	34	32,273	7,365	27,000	31,300	37,000
10-14	28	36,431	7,417	30,442	37,642	42,200
15-19	19	42,076	9,450	33,900	41,871	48,060
20-24	15	38,896	8,306	31,300	40,000	46,800
25-29	18	43,044	11,380	36,114	39,000	52,500
Forensics						
Total	190	34,847	8,272	29,891	33,750	40,000
2-4	23	25,973	4,196	20,940	27,000	29,230
5-9	45	30,009	5,477	26,500	30,000	32,000
10-14	38	35,233	6,590	31,000	32,818	38,500
15-19	32	38,216	7,351	34,000	38,000	43,525
20-24	26	41,192	6,604	36,548	40,463	46,176
Other						
Total	59	36,829	10,234	29,000	35,000	42,000
5-9	15	33,710	6,738	28,500	32,000	41,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 3.2.2

SALARIES of BS GOVERNMENTAL CHEMISTS employed FULL-TIME
by TOTAL SUBORDINATES and YEARS SINCE BS
1990 ACS Salary Survey

TOTAL SUBORDINATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
None						
Total	350	36,260	10,600	29,000	35,000	42,601
2-4	37	24,763	4,893	20,940	24,440	28,704
5-9	91	30,588	6,401	26,500	30,000	35,000
10-14	48	34,769	6,230	30,000	35,000	39,000
15-19	50	39,957	8,927	34,000	39,975	46,510
20-24	37	40,412	8,539	34,620	40,000	44,000
25-29	30	43,074	10,493	36,114	44,142	51,121
30-34	15	47,223	13,151	38,000	52,500	55,381
35-39	25	44,409	9,452	38,000	43,500	53,284
1-2						
Total	127	36,928	10,720	29,000	36,000	44,000
2-4	17	24,997	4,490	23,000	25,369	28,680
5-9	18	33,705	8,615	28,600	32,879	37,100
10-14	20	34,677	7,846	29,500	32,000	40,200
15-19	17	37,170	8,536	31,824	37,000	41,800
20-24	17	40,763	8,422	35,880	40,000	47,383
25-29	17	44,068	11,778	37,032	42,000	47,572
3-9						
Total	182	39,430	10,110	32,000	38,358	45,540
5-9	30	32,631	5,546	27,800	31,400	38,216
10-14	42	36,486	6,548	32,000	37,050	40,500
15-19	36	40,612	9,497	33,000	38,483	48,000
20-24	19	46,482	10,402	41,000	46,800	51,121
25-29	21	45,049	8,487	39,400	45,540	51,100
10-14						
Total	53	45,022	12,404	36,400	42,867	54,531
15-29						
Total	36	48,573	14,391	38,660	47,786	57,500
30-49						
Total	22	54,931	9,378	50,429	58,736	62,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 3.3.1

SALARIES of MS GOVERNMENTAL CHEMISTS employed FULL-TIME
by WORK FUNCTION and YEARS SINCE BS
1990 ACS Salary Survey

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
R&D Mgt						
Total	53	57,537	11,398	49,000	56,000	65,000
Basic research						
Total	58	40,725	9,642	33,875	40,150	46,000
Applied research						
Total	78	45,220	11,068	37,500	45,721	52,400
15-19	15	42,493	6,786	38,000	44,015	46,000
General Mgt						
Total	64	53,166	15,027	41,500	49,708	64,050
15-19	18	46,881	8,295	40,162	47,750	54,017
20-24	15	53,977	12,186	44,000	54,666	65,500
Production						
Total	30	37,706	10,517	32,000	35,000	46,176
Health & Safety						
Total	105	41,480	10,645	33,000	40,000	50,000
5-9	15	34,448	11,262	25,000	35,100	38,000
15-19	15	42,270	6,431	35,825	42,601	48,281
20-24	19	43,587	10,575	32,800	46,861	50,000
Forensics						
Total	109	37,726	9,903	30,887	37,674	44,000
5-9	23	31,430	7,114	27,745	31,883	37,000
10-14	20	34,626	7,036	29,810	35,250	39,500
15-19	21	39,151	9,578	35,000	39,000	43,704
20-24	20	43,041	9,319	36,764	41,501	49,828
Other						
Total	42	42,970	12,314	35,825	42,301	50,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 3.3.2

SALARIES of MS GOVERNMENTAL CHEMISTS employed FULL-TIME
by TOTAL SUBORDINATES and YEARS SINCE BS
1990 ACS Salary Survey

TOTAL SUBORDINATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
None						
Total	231	40,449	11,163	32,500	39,500	46,571
5-9	46	30,626	7,383	24,788	31,442	35,360
10-14	41	37,077	6,400	31,883	37,000	42,000
15-19	35	41,747	6,667	37,500	42,601	46,000
20-24	29	42,848	8,979	36,400	42,000	48,000
25-29	24	45,118	9,992	40,050	46,220	51,061
30-34	20	47,114	11,991	38,602	46,125	51,500
35-39	24	47,605	14,165	38,951	46,571	57,091
1-2						
Total	111	41,045	10,837	33,000	40,000	48,000
10-14	18	35,969	9,155	29,891	38,030	41,000
15-19	15	36,947	10,091	30,000	38,039	45,441
20-24	21	45,561	9,276	39,407	48,000	51,500
3-9						
Total	120	43,276	10,849	35,000	42,000	52,052
10-14	20	38,076	8,656	31,082	38,995	45,221
15-19	29	42,788	9,171	37,000	41,500	50,000
20-24	29	43,361	10,774	34,836	40,440	53,000
25-29	15	52,695	7,701	48,000	52,400	58,000
10-14						
Total	34	51,832	11,546	45,000	51,956	62,000
15-29						
Total	54	52,312	13,108	46,000	50,500	60,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 3.4.1

SALARIES of PhD GOVERNMENTAL CHEMISTS employed FULL-TIME
by FUNCTION and YEARS SINCE BS
1990 ACS Salary Survey

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
R&D Mgt						
Total	340	64,390	12,892	55,548	65,000	75,000
10-14	15	52,897	9,528	45,000	50,000	62,200
15-19	33	59,929	12,089	52,000	57,000	67,000
20-24	57	62,743	13,517	54,000	63,000	70,000
25-29	97	63,056	10,990	54,192	64,000	71,000
30-34	59	68,262	12,663	60,000	69,422	76,982
35-39	46	69,353	12,679	65,000	73,000	77,000
40 or more	28	71,950	8,759	65,444	75,000	78,500
Basic research						
Total	589	51,754	15,265	41,750	50,000	61,000
5-9	52	39,266	10,471	33,000	39,400	43,900
10-14	115	44,922	9,661	38,213	45,000	50,000
15-19	76	45,257	10,992	39,000	44,500	52,840
20-24	77	53,350	12,378	45,000	51,121	60,000
25-29	75	55,223	12,488	45,440	55,000	65,000
30-34	77	60,341	17,417	48,045	58,000	71,000
35-39	61	62,187	15,149	53,284	62,088	71,000
40 or more	46	63,224	12,998	55,000	65,000	75,000
Applied research						
Total	497	49,957	12,314	42,000	49,000	58,000
5-9	43	37,371	9,537	30,000	37,000	42,100
10-14	70	43,625	9,212	37,500	42,601	48,000
15-19	79	47,265	9,512	41,000	46,200	53,000
20-24	85	51,964	11,554	44,595	51,000	59,000
25-29	82	54,272	10,291	46,440	53,500	62,000
30-34	57	56,314	10,166	48,000	55,381	62,095
35-39	43	55,721	11,623	46,571	55,000	65,000
40 or more	28	60,070	10,792	52,000	61,342	65,444
General Mgt						
Total	290	53,345	14,541	42,601	53,000	63,100
5-9	21	33,704	6,907	28,000	31,600	37,000
10-14	30	41,447	9,423	36,000	40,764	46,500
15-19	51	46,877	8,924	40,500	48,000	53,000
20-24	51	55,937	10,880	48,000	56,000	62,800
25-29	56	58,349	12,011	51,061	58,000	68,689
30-34	30	60,761	11,210	53,000	59,900	70,000
35-39	22	65,599	12,058	57,026	65,000	77,000
40 or more	24	66,740	13,250	57,000	65,200	76,691
Production						
Total	105	37,401	11,413	30,163	36,000	45,600
10-14	24	33,710	6,277	30,027	32,026	38,500
15-19	17	37,332	8,357	32,000	35,755	40,000
20-24	15	43,972	8,185	36,000	45,800	51,085

Table 3.4.1 (Continued)

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Health & Safety						
Total	369	42,656	12,908	33,000	41,628	51,121
2-4	16	26,054	4,446	21,390	28,000	29,500
5-9	51	33,204	8,918	27,000	31,600	37,817
10-14	48	37,365	7,378	32,000	37,492	42,450
15-19	52	44,285	9,833	36,156	44,500	50,561
20-24	57	43,520	11,859	35,000	43,000	50,000
25-29	55	49,994	13,593	38,000	52,500	59,524
30-34	37	48,154	11,905	38,500	47,112	57,074
35-39	29	44,387	11,648	36,600	42,305	51,800
40 or more	21	55,220	13,567	48,000	55,000	60,000
Forensics						
Total	355	37,147	9,705	30,072	36,200	43,000
2-4	26	26,037	3,975	23,900	26,500	29,000
5-9	73	30,715	5,966	27,000	30,072	35,000
10-14	64	35,787	7,823	30,918	35,000	39,500
15-19	60	38,595	7,963	34,000	39,000	43,352
20-24	59	43,202	8,685	37,000	41,002	48,655
25-29	36	43,459	8,981	36,259	42,500	47,976
Writing						
Total	19	45,176	9,459	41,000	45,000	51,000
Chem info services						
Total	16	46,328	19,008	28,500	50,411	61,500
Computers						
Total	26	43,231	8,307	36,810	42,945	47,000
Consulting						
Total	16	45,440	14,425	33,750	42,895	60,350
Other						
Total	148	43,962	15,134	31,912	41,250	51,600
5-9	28	34,223	7,894	28,550	35,000	41,898
10-14	21	38,546	8,580	31,710	37,880	44,021
15-19	21	38,678	9,532	30,000	37,500	48,000
20-24	18	52,043	14,863	35,000	53,500	66,000
25-29	28	49,339	14,329	37,400	49,851	56,269

Note: Cells with fewer than 15 cases have been suppressed.

Table 3.4.2

SALARIES of PhD GOVERNMENTAL CHEMISTS employed FULL-TIME
by TOTAL SUBORDINATES and YEARS SINCE BS
1990 ACS Salary Survey

TOTAL SUBORDINATES & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
None						
Total	400	50,840	13,237	42,000	49,000	58,927
5-9	30	39,011	8,300	30,684	39,400	43,000
10-14	54	43,284	9,371	39,000	44,000	47,971
15-19	53	45,588	9,391	38,200	46,861	49,940
20-24	59	49,576	11,628	41,000	46,500	56,000
25-29	71	53,091	11,290	45,000	53,000	60,300
30-34	44	54,642	13,335	45,000	54,185	60,600
35-39	46	58,472	16,103	49,000	59,500	72,194
40 or more	42	61,636	10,975	54,000	60,500	65,444
1-2						
Total	364	51,788	11,608	42,995	51,061	60,000
5-9	31	44,488	9,213	40,601	43,000	51,400
10-14	69	46,743	8,585	40,400	45,000	52,800
15-19	46	46,395	9,015	40,601	46,531	54,000
20-24	51	50,661	10,197	44,000	51,121	56,692
25-29	60	52,774	11,010	45,016	51,750	60,100
30-34	53	57,758	11,221	46,571	59,399	65,000
35-39	29	61,560	12,475	53,000	60,000	70,000
40 or more	25	60,631	11,097	53,961	61,000	65,444
3-9						
Total	367	57,591	13,089	48,000	58,000	65,444
10-14	56	48,170	11,117	40,000	47,931	59,200
15-19	50	51,738	11,056	43,000	48,500	61,000
20-24	75	56,905	10,140	49,700	55,000	63,000
25-29	71	60,863	10,938	54,500	60,000	68,378
30-34	39	61,550	9,669	54,000	62,000	70,000
35-39	37	65,997	15,610	57,054	68,280	76,000
40 or more	30	68,103	12,547	58,000	65,444	77,000
10-14						
Total	62	63,303	14,743	55,000	64,500	72,000
25-29	18	63,256	8,254	56,000	64,500	70,000
15-29						
Total	112	64,833	11,429	55,548	65,000	73,460
15-19	16	61,633	14,281	50,750	60,500	69,700
20-24	23	64,003	10,387	57,543	62,000	71,000
25-29	32	62,788	11,421	54,500	61,600	69,137
30-34	17	67,763	8,373	64,680	68,124	76,700
35-39	12	68,036	11,322	63,500	69,875	76,300
30-49						
Total	61	64,332	13,198	57,800	67,292	73,000
25-29	23	65,721	12,575	57,000	69,942	75,000
50-99						
Total	50	68,371	18,553	60,374	69,254	78,000
100 or more						
Total	27	75,817	14,522	65,000	76,000	79,200

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.1.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by CONTRACT STATUS and RANK
1990 ACS Salary Survey

CONTRACT STATUS & ACADEMIC RANK	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
9-10 month						
Full professor	2245	53,571	15,632	43,000	51,000	60,000
Assoc professor	783	38,388	7,148	33,000	37,800	43,000
Asst professor	781	32,416	5,320	29,000	32,000	35,257
Instructor	75	29,233	6,643	25,000	28,000	32,500
No ranks	73	37,953	8,111	32,400	37,500	44,000
11-12 month						
Full professor	850	73,658	21,587	60,000	70,000	85,000
Assoc professor	310	52,644	14,268	44,300	51,350	59,000
Asst professor	269	40,794	10,312	33,200	40,500	45,500
Instructor	83	41,893	18,036	29,000	36,000	48,000
Research assoc	339	36,425	12,857	26,080	35,000	45,000
Other nonfaculty	170	43,441	17,747	31,000	39,000	54,000
No ranks	21	48,457	10,672	42,672	48,300	50,500

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.2.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and YEARS SINCE PhD - 9 or 10 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & YEARS SINCE PhD	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Full professor						
Total	2245	53,571	15,632	43,000	51,000	60,000
5-9	16	46,872	12,230	36,500	48,000	51,500
10-14	100	47,688	12,532	38,000	48,200	54,100
15-19	312	50,437	14,109	40,650	49,000	57,000
20-24	658	50,317	13,575	41,000	48,000	57,000
25-29	540	52,778	13,327	44,000	51,000	58,040
30-34	375	57,832	16,889	47,000	54,500	65,500
35-39	180	61,562	18,041	48,250	60,000	71,300
40 or more	62	73,339	22,031	54,000	70,500	94,200
Assoc professor						
Total	783	38,388	7,148	33,000	37,800	43,000
5-9	130	36,133	6,668	31,000	35,000	40,400
10-14	225	38,413	7,549	33,000	37,100	42,333
15-19	182	38,165	6,949	33,000	37,710	43,000
20-24	117	38,660	6,936	34,000	38,000	43,000
25-29	75	40,466	6,263	36,000	41,000	45,000
30-34	34	42,196	7,492	37,500	43,250	46,500
Asst professor						
Total	781	32,416	5,320	29,000	32,000	35,257
0-1	37	28,863	4,954	26,000	28,500	30,000
2-4	249	32,310	5,624	28,335	31,000	35,000
5-9	360	33,141	5,325	30,000	32,865	35,810
10-14	89	31,776	4,223	29,000	31,000	34,030
15-19	26	30,553	3,878	28,560	30,901	33,000
Instructor						
Total	75	29,233	6,643	25,000	28,000	32,500
2-4	23	28,791	4,017	27,500	28,000	30,650
5-9	17	26,747	4,368	24,000	26,000	29,500
No ranks						
Total	73	37,953	8,111	32,400	37,500	44,000
15-19	18	38,147	6,115	33,800	38,006	40,000
20-24	18	39,773	7,026	36,000	39,241	45,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.2.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and YEARS SINCE PhD - 11 or 12 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & YEARS SINCE PhD	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Full professor						
Total	850	73,658	21,587	60,000	70,000	85,000
10-14	23	61,828	16,075	52,000	62,000	69,000
15-19	116	66,875	19,481	53,495	65,000	80,869
20-24	240	69,656	19,516	57,000	68,000	80,000
25-29	210	74,999	20,633	60,000	71,000	86,500
30-34	136	77,918	21,458	63,500	74,500	90,333
35-39	89	79,736	22,376	65,000	75,900	90,000
40 or more	32	93,900	27,730	72,525	88,750	107,000
Assoc professor						
Total	310	52,644	14,268	44,300	51,350	59,000
5-9	29	47,537	12,349	40,000	45,550	54,000
10-14	78	50,874	14,066	43,677	50,000	55,000
15-19	73	53,995	14,768	45,000	52,000	60,000
20-24	71	55,461	11,685	47,000	54,000	60,700
25-29	33	51,123	15,385	43,680	50,000	56,000
30-34	17	56,738	19,270	48,000	54,000	65,000
Asst professor						
Total	269	40,794	10,312	33,200	40,500	45,500
2-4	67	35,154	8,210	28,000	36,000	42,000
5-9	131	42,393	10,010	36,300	41,500	46,000
10-14	41	42,687	8,807	37,400	41,800	50,000
Instructor						
Total	83	41,893	18,036	29,000	36,000	48,000
5-9	21	38,000	20,876	30,000	32,000	37,500
10-14	16	44,196	11,711	34,500	41,250	51,500
Research assoc						
Total	339	36,425	12,857	26,080	35,000	45,000
0-1	25	24,559	8,443	18,500	21,600	25,000
2-4	67	28,061	8,148	21,500	27,000	33,000
5-9	104	35,284	10,110	29,060	33,475	40,450
10-14	50	43,217	11,463	36,000	42,000	49,600
15-19	49	39,536	11,371	32,130	40,500	48,000
20-24	22	46,406	14,478	36,000	45,611	59,300
Other nonfaculty						
Total	170	43,441	17,747	31,000	39,000	54,000
2-4	19	27,937	6,827	22,000	26,000	35,000
5-9	35	34,983	7,871	30,000	36,000	40,000
10-14	17	44,949	13,482	34,300	42,500	53,000
15-19	31	43,715	11,596	35,000	45,000	50,300
20-24	26	51,325	17,736	38,000	57,000	64,000
25-29	16	60,892	26,424	39,975	51,150	80,750
No ranks						
Total	21	48,457	10,672	42,672	48,300	50,500

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.3.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and ACADEMIC WORK FUNCTION - 9 or 10 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & WORK FUNCTION	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Teaching						
Full professor	1323	47,362	10,866	40,000	46,300	53,424
Assoc professor	518	36,656	6,638	31,550	36,000	41,143
Asst professor	475	30,345	4,341	27,430	30,000	33,000
Instructor	70	29,178	6,703	25,000	28,000	31,700
No ranks	69	37,574	7,698	32,400	37,000	43,000
Research						
Full professor	298	65,221	16,861	52,000	62,000	75,000
Assoc professor	100	42,147	6,872	37,098	41,000	45,000
Asst professor	176	35,996	5,064	32,500	35,285	38,150
Administration						
Full professor	65	60,645	21,407	47,313	58,000	70,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.3.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and ACADEMIC WORK FUNCTION - 11 or 12 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & WORK FUNCTION	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Teaching						
Full professor	144	56,817	16,316	44,310	57,000	66,272
Assoc professor	70	42,765	10,668	32,500	42,900	52,000
Asst professor	67	31,526	6,859	26,000	30,100	36,000
Instructor	34	35,798	14,542	27,500	32,000	36,000
Research						
Full professor	267	78,184	21,566	62,700	74,600	90,500
Assoc professor	127	54,589	13,395	45,800	52,000	60,500
Asst professor	148	43,573	9,319	38,200	42,000	47,750
Instructor	27	39,872	13,913	29,000	39,000	48,000
Research assoc	297	36,114	13,056	26,000	34,000	45,000
Other nonfaculty	45	32,835	11,176	24,000	33,000	37,600
Administration						
Full professor	209	78,484	20,829	63,000	77,000	89,000
Assoc professor	35	56,125	13,551	47,500	54,000	65,000
Other nonfaculty	63	56,107	18,641	42,600	55,320	68,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.4.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and WORK SPECIALTY - 9 or 10 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & WORK SPECIALTY	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemistry						
Full professor	198	55,374	15,788	44,000	54,000	62,500
Assoc professor	100	38,581	6,916	33,000	38,000	43,000
Asst professor	94	33,608	5,953	30,000	33,000	36,000
Biotechnology						
Full professor	15	59,305	18,257	45,828	56,000	75,000
Asst professor	15	39,853	4,900	35,000	39,000	45,000
General chemistry						
Full professor	197	43,265	9,798	36,000	43,000	49,300
Assoc professor	89	35,864	7,319	31,000	34,309	40,800
Asst professor	64	28,273	4,279	25,000	27,850	30,400
Instructor	23	29,012	7,488	25,000	28,000	32,500
No ranks	38	37,583	6,788	32,500	36,200	43,000
Analytical chemistry						
Full professor	239	51,443	14,964	41,000	47,500	57,076
Assoc professor	112	38,397	6,876	33,550	38,000	42,000
Asst professor	102	31,501	3,670	29,000	31,500	34,164
Environmental chemistry						
Full professor	45	57,936	15,113	47,400	58,000	68,000
Assoc professor	15	44,652	8,732	39,100	44,000	52,500
Asst professor	24	38,895	6,785	34,108	38,745	43,000
Inorganic chemistry						
Full professor	273	52,747	13,412	44,000	50,551	59,000
Assoc professor	90	38,696	6,125	34,000	38,000	43,000
Asst professor	135	32,091	4,453	28,890	32,000	35,121
Materials science						
Full professor	35	65,833	18,521	50,000	65,500	78,000
Medicinal/Pharmaceutical						
Full professor	24	60,049	15,453	51,500	58,900	67,500
Organic chemistry						
Full professor	635	53,237	15,006	43,000	50,810	59,000
Assoc professor	179	37,100	6,620	32,100	36,396	41,000
Asst professor	163	31,443	4,323	29,000	31,000	34,700
Instructor	22	30,423	5,902	26,000	28,850	34,150
No ranks	17	40,731	8,120	37,500	39,126	46,848
Physical chemistry						
Full professor	449	54,432	14,991	45,000	52,000	60,000
Assoc professor	135	39,422	7,071	34,600	39,123	43,747
Asst professor	121	32,622	4,929	29,000	32,000	35,300
Polymer chemistry						
Full professor	70	64,707	18,813	53,000	60,000	75,600
Other chemical science						
Full professor	31	61,586	22,457	45,000	55,100	76,000
Other non-chem						
Full professor	22	62,275	26,528	45,000	54,500	68,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.4.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and WORK SPECIALTY - 11 or 12 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & WORK SPECIALTY	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemistry						
Full professor	256	76,260	20,955	60,000	74,750	86,150
Assoc professor	110	52,985	14,491	45,092	50,900	59,000
Asst professor	93	41,515	8,858	36,000	41,600	46,000
Instructor	16	43,214	15,649	32,790	37,500	56,000
Research assoc	85	33,893	10,665	25,100	33,000	39,000
Other nonfaculty	21	33,800	14,821	23,000	30,000	36,000
General chemistry						
Full professor	33	52,040	14,064	43,000	53,990	66,000
Agricultural chemistry						
Full professor	58	67,987	14,158	58,200	65,500	76,000
Asst professor	16	39,900	4,897	37,750	41,200	42,700
Analytical chemistry						
Full professor	40	69,356	18,956	55,068	64,500	83,650
Assoc professor	20	54,012	12,591	45,775	53,000	56,600
Research assoc	39	40,357	11,141	32,966	40,000	48,500
Other nonfaculty	24	38,126	8,137	33,600	37,535	40,376
Environmental chemistry						
Full professor	31	80,085	19,893	65,000	80,000	100,000
Assoc professor	15	52,868	7,473	47,000	52,000	59,000
Asst professor	16	41,222	4,935	38,700	40,675	43,350
Research assoc	22	41,371	14,704	29,111	42,186	50,000
Inorganic chemistry						
Full professor	53	72,593	22,173	60,000	67,500	85,000
Research assoc	18	35,117	16,330	20,004	30,500	45,600
Materials science						
Research assoc	16	42,081	11,858	28,500	46,600	50,000
Medicinal/Pharmaceutical						
Full professor	72	75,475	20,983	61,000	70,000	88,315
Assoc professor	34	59,833	13,754	50,500	58,500	70,000
Asst professor	44	42,539	8,463	38,284	42,500	46,750
Research assoc	22	34,639	9,563	26,000	34,525	41,000
Organic chemistry						
Full professor	80	68,226	21,420	56,512	65,250	75,250
Assoc professor	31	45,394	15,005	33,000	44,228	54,000
Asst professor	25	34,772	9,048	29,000	32,000	40,000
Research assoc	41	31,760	14,691	20,000	29,000	40,000
Other nonfaculty	15	39,689	13,373	31,000	40,000	46,500

Table 4.4.2 (Continued)

ACADEMIC RANK & WORK SPECIALTY	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Physical chemistry						
Full professor	59	71,731	25,501	56,000	68,000	83,000
Assoc professor	20	50,040	12,419	40,820	47,400	56,500
Research assoc	48	37,545	13,313	27,250	35,500	47,911
Other nonfaculty	15	39,251	16,060	31,000	38,500	41,642
Polymer chemistry						
Full professor	18	79,100	17,866	70,000	81,000	90,000
Other chemical science						
Full professor	19	72,669	19,404	60,800	71,100	85,000
Business Administration						
Full professor	17	76,788	17,647	65,000	78,000	90,000
Other non-chem						
Full professor	80	76,878	23,798	60,000	73,500	86,450
Other nonfaculty	43	55,055	22,289	35,000	52,300	72,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.5.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and TENURE - 9 or 10 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & TENURE STATUS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Tenured						
Full professor	2204	53,777	15,600	43,000	51,000	60,000
Assoc professor	668	38,846	6,921	34,000	38,000	43,000
Asst professor	65	32,155	3,463	30,000	31,500	35,000
No ranks	46	40,247	8,071	35,700	39,063	45,700
No, in tenure track						
Full professor	17	44,321	16,382	31,500	37,000	53,000
Assoc professor	96	36,346	8,006	30,000	35,680	41,350
Asst professor	677	32,696	5,374	29,000	32,000	35,500
No, not in tenure track						
Asst professor	31	27,692	5,005	24,000	26,900	29,832
Instructor	59	28,316	6,316	25,000	27,500	31,600
Not applicable						
Full professor	18	40,717	10,657	32,381	36,500	50,000
Assoc professor	15	32,074	6,201	27,000	30,000	38,000
No ranks	20	33,862	7,156	29,750	34,734	39,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.5.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and TENURE - 11 or 12 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & TENURE STATUS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Tenured						
Full professor	767	74,180	21,382	60,000	70,500	85,000
Assoc professor	215	52,840	13,590	45,000	52,000	58,440
No, in tenure track						
Full professor	19	64,193	19,621	54,000	63,300	75,000
Assoc professor	44	52,109	17,064	42,688	50,250	60,000
Asst professor	190	41,005	10,452	35,000	41,000	45,260
No, not in tenure track						
Full professor	26	72,923	19,369	60,000	71,350	81,000
Assoc professor	36	55,201	14,983	44,546	53,400	62,130
Asst professor	53	40,603	9,577	34,000	39,800	46,000
Instructor	60	39,379	17,466	28,000	33,490	44,650
Research assoc	193	37,848	11,361	30,000	36,000	45,000
Other nonfaculty	47	43,029	13,332	34,500	40,752	54,000
Not applicable						
Full professor	38	68,346	26,562	52,000	65,000	85,600
Asst professor	20	39,515	12,411	30,600	36,800	48,000
Instructor	18	48,131	17,950	38,000	46,500	57,000
Research assoc	132	33,273	13,633	22,280	30,000	41,500
Other nonfaculty	109	42,243	18,649	30,000	38,000	50,400

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.6.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and INSTITUTIONAL CONTROL - 9 or 10 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & INST CONTROL	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Public						
Full professor	1445	54,874	14,741	45,000	52,000	60,000
Assoc professor	469	39,409	6,736	34,500	38,500	43,505
Asst professor	489	33,081	4,939	30,000	32,500	35,600
Instructor	52	29,671	7,017	25,000	28,000	33,000
No ranks	65	39,022	7,541	33,800	38,451	44,100
Private						
Full professor	798	51,175	16,865	39,250	48,000	60,000
Assoc professor	314	36,864	7,478	31,000	36,231	42,000
Asst professor	289	31,338	5,722	27,320	30,250	35,000
Instructor	23	28,242	5,729	25,000	28,000	31,600

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.6.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and INSTITUTIONAL CONTROL - 11 or 12 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & INST CONTROL	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Public						
Full professor	628	74,902	19,661	61,325	71,000	85,000
Assoc professor	204	53,429	12,585	45,900	52,000	58,000
Asst professor	155	42,398	7,706	38,000	42,000	45,500
Instructor	48	42,606	16,905	30,500	36,750	48,000
Research assoc	225	35,614	13,144	25,000	34,000	43,300
Other nonfaculty	122	44,210	16,929	32,000	40,000	54,000
No ranks	16	49,787	9,955	45,562	49,250	51,800
Private						
Full professor	221	70,179	26,063	52,000	65,000	87,000
Assoc professor	105	51,186	17,084	40,500	49,800	60,000
Asst professor	113	38,583	12,819	29,700	36,000	45,800
Instructor	35	40,914	19,692	28,500	33,757	44,000
Research assoc	108	38,234	12,229	30,000	37,377	46,100
Other nonfaculty	48	41,485	19,727	27,900	36,500	55,160

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.7.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and TYPE OF INSTITUTION - 9 or 10 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & TYPE OF INST	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
AA Degree						
Full professor	95	44,336	8,558	38,000	44,000	50,700
Assoc professor	42	37,497	9,789	31,000	35,000	43,310
Asst professor	15	28,385	4,970	24,500	27,776	29,450
No ranks	65	38,924	7,609	33,000	38,451	44,100
BS Degree						
Full professor	732	44,365	9,497	37,615	44,000	50,050
Assoc professor	277	34,662	5,687	30,659	34,000	38,200
Asst professor	287	29,410	3,798	27,000	29,000	32,000
Instructor	18	26,062	3,207	24,000	26,000	28,000
MS Degree						
Full professor	333	49,290	8,510	43,000	50,000	55,000
Assoc professor	110	37,659	5,623	33,900	37,000	41,500
Asst professor	105	31,010	3,467	29,000	30,750	33,876
PhD Degree						
Full professor	1076	61,967	16,658	50,000	58,275	70,110
Assoc professor	346	41,593	6,711	36,400	41,395	45,400
Asst professor	366	35,260	5,070	31,900	35,000	38,000
Instructor	37	29,176	5,768	25,000	28,000	33,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.7.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and TYPE OF INSTITUTION - 11 or 12 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & TYPE OF INST	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
AA Degree						
No ranks	17	46,476	8,900	42,672	48,300	50,200
BS Degree						
Full professor	106	54,747	15,611	43,000	53,639	65,000
Assoc professor	36	39,576	12,732	28,573	37,500	45,782
Asst professor	44	28,346	4,684	25,000	28,150	30,850
MS Degree						
Full professor	62	62,240	14,330	52,000	62,122	71,000
PhD Degree						
Full professor	509	78,177	20,905	65,000	75,000	89,000
Assoc professor	158	53,625	12,788	45,800	52,000	59,000
Asst professor	131	42,672	7,899	38,000	42,000	45,800
Instructor	54	42,043	17,089	29,000	36,000	48,000
Research assoc	277	36,630	13,392	25,100	35,000	45,000
Other nonfaculty	126	42,437	16,483	31,000	38,750	52,300
Medical school						
Full professor	164	76,872	21,259	60,000	74,000	89,130
Assoc professor	100	56,292	15,055	48,000	53,500	65,000
Asst professor	84	45,330	10,832	38,850	43,500	51,500
Instructor	17	45,795	23,443	32,500	39,000	48,000
Research assoc	56	35,710	9,311	30,000	34,750	40,250
Other nonfaculty	20	37,292	14,513	26,000	33,650	45,250

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.8.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by INSTITUTIONAL CONTROL and TYPE OF INSTITUTION - 9 or 10 Month Contract
1990 ACS Salary Survey

CONTROL & TYPE OF INSTITUTION	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Public						
AA Degree						
Full professor	148	45,258	7,680	40,000	45,000	50,024
Assoc professor	73	38,822	8,315	33,240	37,400	44,074
Asst professor	29	30,072	5,933	26,500	28,680	32,072
Instructor	53	23,926	11,295	15,300	25,000	31,250
No ranks	142	38,500	8,270	31,600	38,467	44,885
BS Degree						
Full professor	321	46,626	8,010	41,235	46,000	52,000
Assoc professor	110	37,367	5,922	33,125	36,390	41,000
Asst professor	123	29,579	4,302	27,200	30,000	32,000
Instructor	32	17,796	8,868	9,000	21,500	23,500
MS Degree						
Full professor	305	49,539	8,363	43,000	50,000	55,000
Assoc professor	99	38,152	5,595	34,000	37,217	42,000
Asst professor	99	30,891	4,697	29,200	31,000	34,000
Instructor	26	31,413	22,496	21,000	26,750	36,000
PhD Degree						
Full professor	943	61,753	16,845	50,000	58,000	70,110
Assoc professor	295	41,793	6,990	36,400	42,000	45,960
Asst professor	332	35,706	6,304	31,900	35,000	39,000
Instructor	65	25,731	9,525	20,000	26,625	32,000
No ranks	277	35,331	10,564	28,000	35,000	43,000
Private						
BS Degree						
Full professor	478	42,610	10,228	35,000	41,400	48,605
Assoc professor	207	33,339	5,592	29,150	32,000	37,100
Asst professor	201	28,432	4,642	26,000	28,218	31,000
Instructor	43	20,523	8,741	16,000	22,000	27,500
MS Degree						
Full professor	63	47,038	9,759	40,000	47,111	53,000
Assoc professor	26	38,008	7,685	33,000	39,563	42,000
Asst professor	24	30,015	4,611	26,700	30,375	31,980
PhD Degree						
Full professor	344	65,604	17,505	53,000	63,000	74,800
Assoc professor	125	44,133	6,987	39,835	43,625	49,000
Asst professor	107	38,322	6,724	34,000	36,500	42,500
Instructor	17	28,530	10,173	21,000	29,000	36,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.8.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by INSTITUTIONAL CONTROL and TYPE OF INSTITUTION - 11 or 12 Month Contract
1990 ACS Salary Survey

CONTROL & TYPE OF INSTITUTION	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Public						
AA Degree						
Full professor	24	57,102	14,370	49,000	53,000	68,000
Other nonfaculty	15	47,923	20,467	35,400	48,900	60,054
No ranks	26	46,038	11,921	41,000	48,000	50,200
BS Degree						
Full professor	51	62,093	13,105	53,278	60,844	70,000
Other nonfaculty	15	35,468	18,000	20,450	31,000	42,000
MS Degree						
Full professor	55	64,937	12,743	55,000	64,908	73,700
Other nonfaculty	15	53,114	26,284	29,424	42,000	72,000
PhD Degree						
Full professor	489	78,519	20,539	65,000	75,000	90,000
Assoc professor	140	52,967	13,246	45,000	52,000	58,000
Asst professor	115	42,194	8,079	38,000	41,900	45,000
Instructor	69	39,905	19,525	25,284	34,000	48,000
Research assoc	575	27,902	11,634	20,000	24,000	33,000
Other nonfaculty	237	33,927	14,092	23,878	30,000	42,000
Medical school						
Full professor	120	76,572	23,093	60,000	74,000	84,000
Assoc professor	61	54,904	10,796	48,750	53,500	58,220
Asst professor	60	45,723	10,951	40,600	44,000	52,000
Research assoc	62	31,011	10,852	23,000	29,000	39,000
Other nonfaculty	33	33,370	13,811	23,400	29,707	37,400
Private						
BS Degree						
Full professor	70	48,502	15,278	37,800	46,000	56,000
Assoc professor	30	38,601	13,792	26,880	35,244	43,400
Asst professor	47	27,195	4,985	24,000	27,000	30,500
PhD Degree						
Full professor	97	82,946	24,574	65,000	84,000	96,870
Assoc professor	36	52,853	13,549	45,000	53,572	60,000
Asst professor	44	44,369	10,994	38,000	42,000	52,000
Instructor	36	38,228	19,204	27,000	31,500	43,000
Research assoc	279	28,338	13,692	20,000	24,000	32,000
Other nonfaculty	95	36,678	29,186	21,500	27,400	41,000
Medical school						
Full professor	69	80,001	24,853	60,000	75,000	94,400
Assoc professor	49	58,476	20,427	45,046	51,500	69,100
Asst professor	39	49,422	18,712	36,750	45,500	58,300
Research assoc	48	30,471	9,233	24,000	30,000	37,254
Other nonfaculty	32	31,904	15,420	23,150	29,000	34,750

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.9.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and GEOGRAPHIC REGION - 9 or 10 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & GEOGRAPHIC REGION	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific						
Full professor	288	59,274	17,577	48,000	56,000	66,750
Assoc professor	60	39,842	7,380	34,850	40,000	45,000
Asst professor	55	34,513	5,184	31,500	35,000	38,000
No ranks	25	42,747	7,377	37,000	40,000	48,500
Mountain						
Full professor	129	48,793	12,119	40,500	47,000	55,000
Assoc professor	38	37,473	8,460	30,254	36,800	43,500
Asst professor	47	31,462	4,195	29,925	31,000	35,000
West North Central						
Full professor	199	49,028	14,822	40,000	46,033	54,000
Assoc professor	61	34,726	6,109	31,000	34,500	39,000
Asst professor	81	30,111	4,088	27,740	30,000	32,751
West South Central						
Full professor	183	49,419	18,034	38,000	44,000	55,400
Assoc professor	65	35,551	4,687	32,000	36,000	38,000
Asst professor	66	32,822	6,072	29,400	31,500	35,500
East North Central						
Full professor	418	52,464	14,463	43,000	50,000	60,000
Assoc professor	141	37,944	6,872	33,000	37,100	42,000
Asst professor	142	32,120	5,724	28,500	30,974	35,300
Instructor	16	27,780	5,304	24,500	26,500	29,750
East South Central						
Full professor	128	44,140	11,549	37,000	42,000	49,800
Assoc professor	55	33,909	4,783	31,500	34,000	36,336
Asst professor	39	28,887	3,804	26,148	28,409	31,000
Middle Atlantic						
Full professor	385	57,506	15,758	47,500	54,000	67,000
Assoc professor	147	40,439	7,721	34,350	40,000	45,000
Asst professor	157	33,189	4,863	30,000	32,742	36,000
South Atlantic						
Full professor	311	52,992	13,793	43,000	50,640	60,000
Assoc professor	141	38,465	6,616	34,000	38,000	42,300
Asst professor	129	32,164	5,155	28,000	31,500	35,000
Instructor	16	26,944	4,417	23,830	28,000	28,500
New England						
Full professor	180	58,147	13,586	50,000	55,000	64,125
Assoc professor	72	43,351	5,947	40,000	43,000	48,000
Asst professor	61	35,213	5,634	33,000	35,000	36,500

Note: Cells with fewer than 15 cases have been suppressed.

Table 4.9.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME
by RANK and GEOGRAPHIC REGION - 11 or 12 Month Contract
1990 ACS Salary Survey

ACADEMIC RANK & GEOGRAPHIC REGION	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific						
Full professor	91	81,802	24,945	65,000	80,000	101,000
Assoc professor	27	53,146	13,205	42,000	52,640	60,000
Asst professor	36	41,396	10,376	33,000	40,450	49,930
Research assoc	52	42,127	15,116	31,000	40,000	48,000
Other nonfaculty	27	40,345	15,241	29,000	40,752	49,000
Mountain						
Full professor	41	68,691	13,632	60,000	69,900	74,600
Assoc professor	20	47,118	9,315	41,500	46,460	53,325
Research assoc	29	31,520	12,029	21,000	30,000	43,000
West North Central						
Full professor	95	70,406	22,689	55,000	64,800	83,000
Assoc professor	28	50,900	19,282	35,500	48,333	61,000
Asst professor	30	39,190	9,398	32,000	40,000	46,000
Research assoc	48	33,193	10,517	25,000	32,733	37,627
Other nonfaculty	15	42,859	19,821	25,000	37,000	60,680
West South Central						
Full professor	84	67,870	20,865	52,250	64,117	83,500
Assoc professor	32	54,142	15,311	44,000	53,647	59,000
Asst professor	29	41,381	9,650	36,000	40,500	44,100
Research assoc	33	34,236	13,238	24,000	33,000	40,000
Other nonfaculty	15	47,353	20,102	36,000	40,000	59,000
East North Central						
Full professor	152	75,281	20,122	63,865	74,000	85,221
Assoc professor	42	55,934	14,297	46,500	52,000	64,000
Asst professor	43	40,679	10,618	32,000	42,000	47,767
Research assoc	54	35,505	12,255	24,000	36,000	44,000
Other nonfaculty	37	41,427	14,805	32,000	37,500	50,000
East South Central						
Full professor	61	71,397	21,830	57,000	67,500	84,000
Assoc professor	22	46,853	10,485	42,000	48,425	52,000
Asst professor	20	39,900	9,326	33,200	40,100	43,250
Research assoc	18	37,725	13,385	27,500	33,750	42,000
Middle Atlantic						
Full professor	129	72,790	20,415	60,000	70,700	84,000
Assoc professor	50	50,695	12,550	43,000	52,000	57,000
Asst professor	33	38,920	10,155	32,000	39,000	43,500
Instructor	15	38,933	15,488	27,000	32,000	47,000
Research assoc	41	38,502	12,264	28,000	37,500	48,000
Other nonfaculty	20	45,813	17,059	30,750	40,650	62,800
South Atlantic						
Full professor	142	75,165	19,923	60,300	72,725	85,000
Assoc professor	64	53,250	12,631	45,900	52,346	56,050
Asst professor	47	39,340	8,974	33,000	40,800	43,200
Research assoc	38	36,617	11,476	27,500	35,750	45,000
Other nonfaculty	23	43,489	15,387	32,000	41,642	50,000
New England						
Full professor	45	75,034	27,419	56,000	70,000	90,000
Assoc professor	23	59,075	18,781	47,000	58,000	67,500
Asst professor	18	49,739	14,894	36,100	48,000	60,000
Research assoc	24	36,504	13,222	28,500	31,900	45,000
Other nonfaculty	16	51,595	27,300	28,000	54,500	66,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 5.1.1

STIPENDS of POSTDOCTORAL FELLOWS
by INSTITUTIONAL CONTROL and WORK SPECIALTY
1990 ACS Salary Survey

INST. CONTROL & SPECIALTY	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Biochemistry						
Total	148	23,951	18,780	20,000	22,000	25,000
Public	84	22,416	3,809	19,500	23,000	25,000
Private	64	25,942	28,130	20,000	22,000	25,000
Chemistry						
Total	419	21,385	4,334	18,000	20,100	24,000
Public	274	21,372	4,632	18,000	20,050	24,000
Private	145	21,411	3,714	18,000	20,500	24,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 6.1.1

SALARIES of CHEMICAL ENGINEERS employed FULL-TIME in INDUSTRY
by DEGREE and YEARS SINCE BS
1990 ACS Salary Survey

HIGHEST DEGREE & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS						
Total	788	55,190	26,288	37,800	49,400	64,560
2-4	100	34,591	5,928	32,000	34,128	36,625
5-9	162	39,546	7,014	35,600	38,634	44,000
10-14	89	48,898	12,367	41,760	48,840	59,800
15-19	71	55,556	11,760	46,000	54,000	62,500
20-24	47	61,462	18,950	50,000	60,400	70,000
25-29	46	61,980	28,130	48,000	56,700	65,000
30-34	90	75,041	33,085	54,400	66,950	85,000
35-39	86	72,915	29,003	55,000	70,000	81,000
40 or more	85	72,686	35,102	54,000	61,000	80,000
MS						
Total	703	60,080	23,418	45,000	55,000	70,000
2-4	15	36,881	4,148	35,500	36,000	38,000
5-9	110	43,126	7,661	38,450	42,000	47,000
10-14	129	51,896	10,577	45,000	50,500	56,500
15-19	118	55,583	14,205	45,400	53,393	64,300
20-24	67	62,497	17,363	52,000	59,400	76,000
25-29	57	70,427	18,508	57,000	65,000	83,000
30-34	63	75,764	32,188	58,000	69,100	84,000
35-39	74	73,710	31,376	54,000	66,500	80,300
40 or more	70	75,098	30,214	55,000	65,634	86,000
PhD						
Total	773	71,264	25,226	53,000	65,000	82,000
5-9	94	49,632	4,807	47,100	50,000	52,500
10-14	150	55,474	9,102	50,000	53,750	60,000
15-19	119	64,024	15,393	54,000	61,000	71,000
20-24	105	78,962	21,472	63,000	74,600	92,500
25-29	112	82,935	21,488	70,000	80,040	92,350
30-34	108	85,764	25,998	70,250	81,250	96,000
35-39	52	89,006	28,649	66,500	89,250	100,000
40 or more	33	91,250	48,105	67,450	79,000	86,300

Note: Cells with fewer than 15 cases have been suppressed.

Table 6.2.1

SALARIES of BS CHEMICAL ENGINEERS employed FULL-TIME in INDUSTRY
by WORK FUNCTION and YEARS SINCE BS
1990 ACS Salary Survey

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
R&D Mgt						
Total	57	69,120	26,377	54,000	66,000	79,200
35-39	15	90,740	34,225	69,300	75,000	110,000
Applied research						
Total	221	47,429	13,752	36,500	46,000	54,500
2-4	40	34,368	4,596	32,275	34,000	35,925
5-9	51	39,951	5,756	36,400	39,600	43,920
10-14	27	48,737	12,772	38,500	48,000	53,400
15-19	17	51,112	8,228	46,000	50,100	54,000
30-34	25	56,798	11,423	48,680	54,500	65,000
35-39	20	62,319	15,967	52,061	59,880	72,000
General Mgt						
Total	92	79,143	44,230	50,100	65,250	93,904
30-34	18	98,233	51,779	65,000	84,500	107,000
40 or more	22	96,792	52,134	58,800	79,500	120,000
Marketing						
Total	103	59,003	29,799	38,500	50,400	68,000
5-9	25	39,608	6,356	36,000	39,000	42,000
Production						
Total	128	47,052	17,072	35,500	43,100	57,300
2-4	21	34,154	5,472	29,000	35,000	37,000
5-9	29	39,645	8,536	35,600	37,752	43,500
10-14	17	47,282	13,172	37,300	45,000	53,000
15-19	17	55,006	10,161	49,000	56,000	60,000
Health & Safety						
Total	37	54,793	18,721	38,400	51,400	70,000
Consulting						
Total	47	51,484	22,295	35,000	48,000	63,000
Other						
Total	68	52,133	15,554	39,950	50,000	63,800
5-9	17	41,798	7,923	37,100	40,000	46,800

Note: Cells with fewer than 15 cases have been suppressed.

Table 6.2.2

SALARIES of BS CHEMICAL ENGINEERS employed FULL-TIME in INDUSTRY
by REGION and YEARS SINCE BS
1990 ACS Salary Survey

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific						
Total	93	52,580	20,095	37,000	50,000	64,000
5-9	16	40,814	7,754	36,600	42,000	45,100
10-14	16	49,206	13,915	39,000	49,000	60,000
Mountain						
Total	39	51,313	26,870	36,000	45,000	54,150
West North Central						
Total	50	50,488	22,726	34,000	44,400	65,000
West South Central						
Total	70	62,232	24,440	45,000	59,400	75,000
East North Central						
Total	159	56,715	30,496	38,100	48,000	68,000
5-9	34	38,205	5,962	34,000	37,050	42,808
30-34	23	77,744	45,616	48,708	70,000	80,000
35-39	28	66,021	25,295	49,000	63,390	73,100
40 or more	17	71,001	46,465	48,000	60,000	73,000
East South Central						
Total	28	46,017	18,120	34,650	38,000	54,950
Middle Atlantic						
Total	175	55,323	26,197	38,600	50,000	62,400
2-4	23	36,108	4,876	33,000	35,300	38,896
5-9	40	40,796	6,501	36,150	40,000	44,749
10-14	22	51,670	15,063	37,000	51,850	62,400
40 or more	24	71,261	29,052	54,000	61,490	91,500
South Atlantic						
Total	99	56,368	30,264	37,400	50,000	65,240
2-4	17	35,312	11,073	30,000	34,000	37,000
5-9	22	39,010	6,890	35,000	37,200	46,350
New England						
Total	62	53,429	22,499	37,300	51,000	62,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 6.2.3

SALARIES of BS CHEMICAL ENGINEERS employed FULL-TIME in INDUSTRY
by SUPERVISORY STATUS and YEARS SINCE BS
1990 ACS Salary Survey

SUPERVISORY STATUS & YEAR SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Non-supervisors						
Total	383	46,643	16,723	35,000	42,000	54,400
2-4	79	34,586	6,016	32,240	34,155	36,500
5-9	103	38,420	6,056	35,000	38,000	42,000
10-14	37	45,442	12,260	38,000	45,500	50,800
15-19	20	51,894	10,297	45,000	49,580	61,500
20-24	15	55,630	22,654	43,000	51,400	63,000
25-29	17	58,553	18,132	48,000	53,600	64,000
30-34	33	60,458	14,227	52,000	58,900	65,000
35-39	37	61,516	19,383	48,000	59,000	72,000
40 or more	33	62,687	19,715	54,000	60,000	66,780
Supervisors						
Total	369	64,202	30,571	45,000	59,800	72,000
2-4	18	34,826	6,096	31,000	34,050	40,000
5-9	51	42,536	7,878	37,000	42,000	47,109
10-14	47	52,418	11,799	45,000	52,200	61,000
15-19	49	57,037	12,309	49,000	56,000	67,000
20-24	32	64,195	16,641	54,500	63,095	70,000
25-29	23	64,791	32,314	48,000	57,000	65,500
30-34	52	82,980	36,164	64,000	72,250	92,200
35-39	47	82,524	32,238	66,000	74,200	93,408
40 or more	48	79,844	42,300	53,500	69,000	96,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 6.3.1

SALARIES of MS CHEMICAL ENGINEERS employed FULL-TIME in INDUSTRY
by WORK FUNCTION and YEARS SINCE BS
1990 ACS Salary Survey

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
R&D Mgt						
Total	74	74,930	26,621	58,000	71,000	85,000
Applied research						
Total	273	52,622	13,628	43,400	50,250	59,400
5-9	60	43,020	6,470	39,100	42,000	46,900
10-14	59	50,813	9,488	44,000	50,000	55,000
15-19	58	51,269	11,470	43,500	50,125	56,700
20-24	21	54,719	11,828	48,610	55,000	62,000
25-29	20	67,796	16,297	56,750	63,578	79,250
30-34	18	61,336	13,015	50,000	60,990	69,100
35-39	15	62,449	17,451	48,000	59,400	76,000
40 or more	17	63,493	15,119	52,000	58,000	72,800
General Mgt						
Total	102	82,218	33,581	60,000	79,000	92,650
30-34	16	95,691	42,678	66,700	83,500	120,000
35-39	17	91,794	39,258	68,300	82,000	100,000
40 or more	19	97,035	36,320	63,855	86,000	130,000
Marketing						
Total	60	59,163	19,002	44,544	57,920	71,550
Production						
Total	62	47,802	12,282	39,380	45,512	54,720
5-9	15	43,157	9,616	36,000	42,000	49,700
Health & Safety						
Total	28	52,425	13,729	43,500	50,000	61,815
Consulting						
Total	44	55,272	12,595	46,500	54,500	65,000
Other						
Total	38	59,697	27,338	45,000	54,144	64,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 6.3.2

SALARIES of MS CHEMICAL ENGINEERS employed FULL-TIME in INDUSTRY
by REGION and YEARS SINCE BS
1990 ACS Salary Survey

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific						
Total	93	57,657	20,072	46,200	54,288	64,500
5-9	21	46,019	8,400	40,000	46,200	52,500
10-14	23	50,441	10,960	42,000	50,000	59,650
15-19	19	56,292	15,212	47,500	57,000	67,620
West North Central						
Total	36	60,056	18,052	47,975	54,290	73,914
West South Central						
Total	64	64,295	25,313	47,900	62,250	75,300
East North Central						
Total	125	57,442	23,779	42,000	52,680	64,000
5-9	19	38,415	3,575	35,500	39,200	41,000
10-14	24	50,772	9,323	44,750	49,960	55,170
15-19	25	52,637	14,155	45,000	50,250	57,720
35-39	17	76,964	41,405	53,000	61,700	82,000
East South Central						
Total	26	53,840	13,238	48,000	51,150	60,000
Middle Atlantic						
Total	188	63,695	24,685	46,500	56,750	75,000
5-9	23	45,741	7,459	40,000	44,096	47,000
10-14	37	53,786	12,299	45,000	51,972	56,500
15-19	26	55,828	14,732	44,000	54,320	64,000
20-24	22	64,365	22,448	50,000	57,500	80,000
25-29	16	76,075	19,212	62,050	76,000	87,500
30-34	15	87,193	38,523	62,460	75,000	85,000
35-39	24	69,567	19,531	54,500	70,500	83,000
40 or more	23	77,597	34,737	52,000	70,000	96,000
South Atlantic						
Total	86	57,569	23,380	42,000	53,500	67,000
5-9	15	39,436	5,916	35,000	40,000	44,000
15-19	15	57,558	15,233	48,200	52,000	75,000
New England						
Total	66	61,293	28,133	45,000	55,000	66,500

Note: Cells with fewer than 15 cases have been suppressed.

Table 6.3.3

SALARIES of MS CHEMICAL ENGINEERS employed FULL-TIME in INDUSTRY
by SUPERVISORY STATUS and YEARS SINCE BS
1990 ACS Salary Survey

SUPERVISORY STATUS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Non-supervisors						
Total	327	51,865	16,767	42,000	49,000	59,000
5-9	65	41,525	6,515	37,000	41,724	45,000
10-14	59	49,075	9,165	44,000	48,000	54,000
15-19	52	48,820	11,914	42,000	48,000	53,715
20-24	31	52,987	9,543	46,000	53,200	60,200
25-29	17	57,847	13,368	53,000	58,962	63,156
30-34	21	67,822	31,881	52,712	60,480	74,000
35-39	35	61,760	16,544	48,000	59,400	74,000
40 or more	34	62,685	22,895	49,500	59,250	70,000
Supervisors						
Total	352	67,476	26,013	50,450	62,000	78,000
5-9	43	45,477	8,825	39,400	45,450	50,000
10-14	69	54,263	11,234	46,500	54,720	58,000
15-19	62	61,623	13,724	51,000	62,000	70,000
20-24	33	72,022	16,877	58,000	70,800	82,500
25-29	36	76,561	18,026	62,050	75,300	87,500
30-34	37	81,743	33,059	61,500	75,000	92,650
35-39	37	83,998	36,529	60,030	72,000	88,000
40 or more	33	87,774	32,732	63,855	78,200	101,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 6.4.1

SALARIES of PhD CHEMICAL ENGINEERS employed FULL-TIME in INDUSTRY
by WORK FUNCTION and YEARS SINCE BS
1990 ACS Salary Survey

WORK FUNCTION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
R&D Mgt						
Total	154	89,394	29,290	70,500	81,100	101,600
15-19	22	73,198	15,761	64,000	73,900	81,100
20-24	37	92,016	22,411	74,600	93,000	106,000
25-29	35	89,187	22,805	75,000	81,240	96,000
30-34	24	99,492	35,647	76,980	87,468	112,000
Basic research						
Total	38	62,646	20,648	50,500	57,160	68,000
Applied research						
Total	423	62,740	16,167	51,000	57,000	71,000
5-9	76	49,502	4,194	47,000	50,000	52,500
10-14	105	53,419	6,718	50,000	53,000	57,000
15-19	71	60,329	10,921	52,000	58,000	68,000
20-24	47	68,568	12,211	58,800	67,035	76,000
25-29	45	75,966	17,196	62,000	72,500	85,500
30-34	46	80,417	16,211	69,000	80,090	90,100
35-39	23	77,347	17,958	63,300	78,000	93,500
General Mgt						
Total	45	99,058	40,106	76,000	90,000	114,000
Marketing						
Total	28	74,359	19,971	60,000	71,900	83,000
Production						
Total	16	61,792	17,111	49,800	56,710	74,665
Computers						
Total	15	63,407	10,648	55,400	63,000	65,000
Consulting						
Total	27	73,599	18,794	62,000	70,080	85,000
Other						
Total	15	78,594	23,829	58,520	74,000	91,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 6.4.2

SALARIES of PhD CHEMICAL ENGINEERS employed FULL-TIME in INDUSTRY
by REGION and YEARS SINCE BS
1990 ACS Salary Survey

REGION & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific						
Total	80	73,158	22,140	55,050	68,580	88,025
10-14	23	59,150	11,111	52,000	55,000	65,000
Mountain						
Total	25	65,205	16,543	54,000	62,000	72,000
West North Central						
Total	27	72,648	25,470	52,500	66,500	92,000
West South Central						
Total	102	74,489	26,927	55,600	68,840	85,000
10-14	17	57,564	8,679	52,500	57,000	63,000
15-19	17	62,581	13,263	52,800	57,500	71,000
20-24	20	77,520	18,972	67,564	75,000	88,400
25-29	21	85,165	23,812	65,100	80,600	96,000
East North Central						
Total	107	66,494	21,077	52,560	61,000	79,700
10-14	23	53,410	9,116	47,600	55,000	57,000
15-19	19	60,566	9,613	55,600	61,000	65,000
30-34	18	83,083	21,472	69,000	81,250	87,000
East South Central						
Total	20	64,387	12,235	54,620	62,500	70,040
Middle Atlantic						
Total	239	72,450	24,332	53,000	66,600	85,000
5-9	39	50,458	4,127	48,000	50,000	53,000
10-14	43	55,080	9,467	48,900	52,500	62,000
15-19	30	66,360	12,045	60,000	67,800	75,000
20-24	29	79,735	22,335	66,000	74,600	92,500
25-29	39	81,547	16,235	70,250	80,000	91,000
30-34	32	92,529	19,957	80,000	90,000	100,500
35-39	16	106,425	38,850	77,100	104,500	122,000
South Atlantic						
Total	103	69,602	34,763	50,000	58,900	76,000
5-9	18	49,451	3,514	47,100	49,800	50,000
10-14	18	54,730	8,714	50,000	52,800	56,000
15-19	24	63,009	21,215	51,500	57,940	68,250
New England						
Total	64	75,203	22,799	57,750	75,000	88,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 6.4.3

SALARIES of PhD CHEMICAL ENGINEERS employed FULL-TIME in INDUSTRY
by SUPERVISORY STATUS and YEARS SINCE BS
1990 ACS Salary Survey

SUPERVISORY STATUS & YEARS SINCE BS	Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Non-supervisors						
Total	348	61,276	15,648	50,550	57,330	69,215
5-9	66	49,253	4,171	47,000	49,590	52,225
10-14	87	53,089	6,922	48,900	52,000	56,600
15-19	52	59,669	9,313	52,850	58,260	67,250
20-24	33	66,151	11,796	57,420	66,028	72,156
25-29	37	71,754	15,676	61,500	71,160	81,200
30-34	35	76,258	20,180	65,000	74,000	85,000
35-39	22	73,995	16,836	63,300	68,750	90,000
40 or more	16	76,066	21,486	63,000	74,150	80,975
Supervisors						
Total	403	79,765	28,780	58,800	75,000	92,000
5-9	28	50,528	6,045	48,000	50,000	54,000
10-14	60	58,754	10,885	51,000	56,000	62,750
15-19	65	67,655	18,353	55,000	65,000	75,600
20-24	66	85,982	22,343	67,800	80,350	98,600
25-29	72	88,866	22,161	75,000	85,500	98,000
30-34	70	91,748	26,917	74,460	87,000	100,000
35-39	27	100,526	32,189	79,620	95,000	115,000
40 or more	15	106,542	64,517	71,000	81,132	114,000

Note: Cells with fewer than 15 cases have been suppressed.

Table 7.1.1

EMPLOYMENT STATUS OF ALL RESPONDENTS
by WORK SPECIALTY
1990 Survey of ACS Members

WORK SPECIALTY	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Chemical engineering	2007	34	11	21	31	4	2108
Row Percent	95.2%	1.6%	.5%	1.0%	1.5%	.2%	100.0%
Column Percent	5.4%	5.7%	1.4%	4.5%	6.0%	6.7%	5.4%
Biochemistry	1912	36	176	23	18	1	2166
Row Percent	88.3%	1.7%	8.1%	1.1%	.8%	.0%	100.0%
Column Percent	5.2%	6.0%	21.8%	5.0%	3.5%	1.7%	5.5%
Biotechnology	720	8	23	14	7	2	774
Row Percent	93.0%	1.0%	3.0%	1.8%	.9%	.3%	100.0%
Column Percent	2.0%	1.3%	2.8%	3.0%	1.4%	3.3%	2.0%
General chemistry	1733	81	2	12	27	1	1856
Row Percent	93.4%	4.4%	.1%	.6%	1.5%	.1%	100.0%
Column Percent	4.7%	13.5%	.2%	2.6%	5.2%	1.7%	4.7%
Agricultural chemistry	1086	11	15	10	15	1	1138
Row Percent	95.4%	1.0%	1.3%	.9%	1.3%	.1%	100.0%
Column Percent	2.9%	1.8%	1.9%	2.2%	2.9%	1.7%	2.9%
Analytical chemistry	6484	66	46	68	89	5	6758
Row Percent	95.9%	1.0%	.7%	1.0%	1.3%	.1%	100.0%
Column Percent	17.6%	11.0%	5.7%	14.7%	17.2%	8.3%	17.2%
Clinical chemistry	382	9	5	9	6	1	412
Row Percent	92.7%	2.2%	1.2%	2.2%	1.5%	.2%	100.0%
Column Percent	1.0%	1.5%	.6%	1.9%	1.2%	1.7%	1.0%
Environmental chemistry	2803	44	15	36	26	3	2927
Row Percent	95.8%	1.5%	.5%	1.2%	.9%	.1%	100.0%
Column Percent	7.6%	7.3%	1.9%	7.8%	5.0%	5.0%	7.4%
Inorganic chemistry	1404	20	68	11	13	2	1518
Row Percent	92.5%	1.3%	4.5%	.7%	.9%	.1%	100.0%
Column Percent	3.8%	3.3%	8.4%	2.4%	2.5%	3.3%	3.9%
Materials science	1492	20	21	16	17	2	1568
Row Percent	95.2%	1.3%	1.3%	1.0%	1.1%	.1%	100.0%
Column Percent	4.0%	3.3%	2.6%	3.5%	3.3%	3.3%	4.0%

Table 7.1.1 (Continued)

WORK SPECIALTY	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Medicinal/Pharmaceutical	1822	20	57	29	25	1	1954
Row Percent	93.2%	1.0%	2.9%	1.5%	1.3%	.1%	100.0%
Column Percent	4.9%	3.3%	7.1%	6.3%	4.8%	1.7%	5.0%
Organic chemistry	4287	50	162	36	45	6	4586
Row Percent	93.5%	1.1%	3.5%	.8%	1.0%	.1%	100.0%
Column Percent	11.6%	8.3%	20.0%	7.8%	8.7%	10.0%	11.7%
Physical chemistry	2009	28	126	19	15	1	2198
Row Percent	91.4%	1.3%	5.7%	.9%	.7%	.0%	100.0%
Column Percent	5.4%	4.7%	15.6%	4.1%	2.9%	1.7%	5.6%
Polymer chemistry	3289	34	29	34	33	6	3425
Row Percent	96.0%	1.0%	.8%	1.0%	1.0%	.2%	100.0%
Column Percent	8.9%	5.7%	3.6%	7.3%	6.4%	10.0%	8.7%
Other chemical science	854	17	8	17	13	0	909
Row Percent	93.9%	1.9%	.9%	1.9%	1.4%	.0%	100.0%
Column Percent	2.3%	2.8%	1.0%	3.7%	2.5%	.0%	2.3%
Business Administration	1176	18	0	30	23	2	1249
Row Percent	94.2%	1.4%	.0%	2.4%	1.8%	.2%	100.0%
Column Percent	3.2%	3.0%	.0%	6.5%	4.4%	3.3%	3.2%
Other non-chem	2069	64	11	34	44	6	2228
Row Percent	92.9%	2.9%	.5%	1.5%	2.0%	.3%	100.0%
Column Percent	5.6%	10.7%	1.4%	7.3%	8.5%	10.0%	5.7%
No Answer	1345	39	33	44	71	16	1548
Row Percent	86.9%	2.5%	2.1%	2.8%	4.6%	1.0%	100.0%
Column Percent	3.6%	6.5%	4.1%	9.5%	13.7%	26.7%	3.9%
Total	36874	599	808	463	518	60	39322
Row Percent	93.8%	1.5%	2.1%	1.2%	1.3%	.2%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.1.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by HIGHEST DEGREE
1990 Survey of ACS Members

HIGHEST DEGREE	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
BS	8034	127	5	101	140	11	8418
Row Percent	95.4%	1.5%	.1%	1.2%	1.7%	.1%	100.0%
Column Percent	24.8%	26.0%	.7%	26.5%	36.0%	29.7%	24.4%
MS	5667	105	5	72	95	9	5953
Row Percent	95.2%	1.8%	.1%	1.2%	1.6%	.2%	100.0%
Column Percent	17.5%	21.5%	.7%	18.9%	24.4%	24.3%	17.3%
PhD	18593	254	751	207	151	16	19972
Row Percent	93.1%	1.3%	3.8%	1.0%	.8%	.1%	100.0%
Column Percent	57.4%	51.9%	98.7%	54.3%	38.8%	43.2%	57.9%
No Answer	121	3	0	1	3	1	129
Row Percent	93.8%	2.3%	.0%	.8%	2.3%	.8%	100.0%
Column Percent	.4%	.6%	.0%	.3%	.8%	2.7%	.4%
Total	32415	489	761	381	389	37	34472
Row Percent	94.0%	1.4%	2.2%	1.1%	1.1%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.2.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by AGE
1990 Survey of ACS Members

AGE	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
20-24	467	2	2	7	6	0	484
Row Percent	96.5%	.4%	.4%	1.4%	1.2%	.0%	100.0%
Column Percent	1.4%	.4%	.3%	1.8%	1.5%	.0%	1.4%
25-29	2752	36	306	23	20	6	3143
Row Percent	87.6%	1.1%	9.7%	.7%	.6%	.2%	100.0%
Column Percent	8.5%	7.4%	40.2%	6.0%	5.1%	16.2%	9.1%
30-34	4976	61	280	51	37	2	5407
Row Percent	92.0%	1.1%	5.2%	.9%	.7%	.0%	100.0%
Column Percent	15.4%	12.5%	36.8%	13.4%	9.5%	5.4%	15.7%
35-39	5036	70	101	49	49	3	5308
Row Percent	94.9%	1.3%	1.9%	.9%	.9%	.1%	100.0%
Column Percent	15.5%	14.3%	13.3%	12.9%	12.6%	8.1%	15.4%
40-44	4464	44	20	58	27	2	4615
Row Percent	96.7%	1.0%	.4%	1.3%	.6%	.0%	100.0%
Column Percent	13.8%	9.0%	2.6%	15.2%	6.9%	5.4%	13.4%
45-49	4617	46	9	52	22	4	4750
Row Percent	97.2%	1.0%	.2%	1.1%	.5%	.1%	100.0%
Column Percent	14.2%	9.4%	1.2%	13.6%	5.7%	10.8%	13.8%
50-54	3463	41	5	54	19	0	3582
Row Percent	96.7%	1.1%	.1%	1.5%	.5%	.0%	100.0%
Column Percent	10.7%	8.4%	.7%	14.2%	4.9%	.0%	10.4%
55-59	2750	51	2	36	42	8	2889
Row Percent	95.2%	1.8%	.1%	1.2%	1.5%	.3%	100.0%
Column Percent	8.5%	10.4%	.3%	9.4%	10.8%	21.6%	8.4%
60-64	1976	55	0	25	80	5	2141
Row Percent	92.3%	2.6%	.0%	1.2%	3.7%	.2%	100.0%
Column Percent	6.1%	11.2%	.0%	6.6%	20.6%	13.5%	6.2%
65-69	575	61	0	4	67	5	712
Row Percent	80.8%	8.6%	.0%	.6%	9.4%	.7%	100.0%
Column Percent	1.8%	12.5%	.0%	1.0%	17.2%	13.5%	2.1%
70 or more	9	0	0	0	0	0	9
Row Percent	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Column Percent	.0%	.0%	.0%	.0%	.0%	.0%	.0%

Table 8.2.1 (Continued)

AGE	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
No Answer	1330	22	36	22	20	2	1432
Row Percent	92.9%	1.5%	2.5%	1.5%	1.4%	.1%	100.0%
Column Percent	4.1%	4.5%	4.7%	5.8%	5.1%	5.4%	4.2%
Total	32415	489	761	381	389	37	34472
Row Percent	94.0%	1.4%	2.2%	1.1%	1.1%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.3.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by RACE-ETHNICITY
1990 Survey of ACS Members

RACE OR ETHNIC GROUP	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
American Indian	116	2	1	1	0	0	120
Row Percent	96.7%	1.7%	.8%	.8%	.0%	.0%	100.0%
Column Percent	.4%	.4%	.1%	.3%	.0%	.0%	.4%
Asian	1947	15	158	22	11	3	2156
Row Percent	90.3%	.7%	7.3%	1.0%	.5%	.1%	100.0%
Column Percent	6.3%	3.2%	21.2%	6.0%	3.0%	8.8%	6.5%
Black	362	5	4	7	1	0	379
Row Percent	95.5%	1.3%	1.1%	1.8%	.3%	.0%	100.0%
Column Percent	1.2%	1.1%	.5%	1.9%	.3%	.0%	1.1%
Hispanic	269	1	9	5	3	1	288
Row Percent	93.4%	.3%	3.1%	1.7%	1.0%	.3%	100.0%
Column Percent	.9%	.2%	1.2%	1.4%	.8%	2.9%	.9%
White	28115	441	559	325	352	29	29821
Row Percent	94.3%	1.5%	1.9%	1.1%	1.2%	.1%	100.0%
Column Percent	90.4%	93.4%	75.1%	89.0%	94.9%	85.3%	90.1%
Other	303	8	13	5	4	1	334
Row Percent	90.7%	2.4%	3.9%	1.5%	1.2%	.3%	100.0%
Column Percent	1.0%	1.7%	1.7%	1.4%	1.1%	2.9%	1.0%
No Answer	1303	17	17	16	18	3	1374
Row Percent	94.8%	1.2%	1.2%	1.2%	1.3%	.2%	100.0%
Column Percent	4.0%	3.5%	2.2%	4.2%	4.6%	8.1%	4.0%
Total	32415	489	761	381	389	37	34472
Row Percent	94.0%	1.4%	2.2%	1.1%	1.1%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.4.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by CITIZENSHIP
1990 Survey of ACS Members

CITIZENSHIP OR VISA STATUS	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Native	28455	444	523	329	350	27	30128
Row Percent	94.4%	1.5%	1.7%	1.1%	1.2%	.1%	100.0%
Column Percent	87.8%	90.8%	68.7%	86.4%	90.0%	73.0%	87.4%
Naturalized	2356	30	13	26	28	7	2460
Row Percent	95.8%	1.2%	.5%	1.1%	1.1%	.3%	100.0%
Column Percent	7.3%	6.1%	1.7%	6.8%	7.2%	18.9%	7.1%
Permanent resident	1237	12	54	17	6	3	1329
Row Percent	93.1%	.9%	4.1%	1.3%	.5%	.2%	100.0%
Column Percent	3.8%	2.5%	7.1%	4.5%	1.5%	8.1%	3.9%
Other visa	253	1	170	5	0	0	429
Row Percent	59.0%	.2%	39.6%	1.2%	.0%	.0%	100.0%
Column Percent	.8%	.2%	22.3%	1.3%	.0%	.0%	1.2%
No Answer	114	2	1	4	5	0	126
Row Percent	90.5%	1.6%	.8%	3.2%	4.0%	.0%	100.0%
Column Percent	.4%	.4%	.1%	1.0%	1.3%	.0%	.4%
Total	32415	489	761	381	389	37	34472
Row Percent	94.0%	1.4%	2.2%	1.1%	1.1%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.5.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by EMPLOYER
1990 Survey of ACS Members

EMPLOYER TYPE	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Industry	18966	109	36	248	190	16	19565
Row Percent	96.9%	.6%	.2%	1.3%	1.0%	.1%	100.0%
Column Percent	58.5%	22.3%	4.7%	65.1%	48.8%	43.2%	56.8%
Government	2880	24	77	12	33	0	3026
Row Percent	95.2%	.8%	2.5%	.4%	1.1%	.0%	100.0%
Column Percent	8.9%	4.9%	10.1%	3.1%	8.5%	.0%	8.8%
Other Nonacademic	2766	153	38	62	58	10	3087
Row Percent	89.6%	5.0%	1.2%	2.0%	1.9%	.3%	100.0%
Column Percent	8.5%	31.3%	5.0%	16.3%	14.9%	27.0%	9.0%
High School	373	8	1	1	11	0	394
Row Percent	94.7%	2.0%	.3%	.3%	2.8%	.0%	100.0%
Column Percent	1.2%	1.6%	.1%	.3%	2.8%	.0%	1.1%
College or University	6867	188	588	51	86	8	7788
Row Percent	88.2%	2.4%	7.6%	.7%	1.1%	.1%	100.0%
Column Percent	21.2%	38.4%	77.3%	13.4%	22.1%	21.6%	22.6%
No Answer	563	7	21	7	11	3	612
Row Percent	92.0%	1.1%	3.4%	1.1%	1.8%	.5%	100.0%
Column Percent	1.7%	1.4%	2.8%	1.8%	2.8%	8.1%	1.8%
Total	32415	489	761	381	389	37	34472
Row Percent	94.0%	1.4%	2.2%	1.1%	1.1%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.5.2

EMPLOYMENT STATUS OF INDUSTRIAL CHEMISTS
by EMPLOYER
1990 Survey of ACS Members

EMPLOYER	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Non-manufacturing	2151	35	5	50	23	2	2266
Row Percent	94.9%	1.5%	.2%	2.2%	1.0%	.1%	100.0%
Column Percent	11.3%	32.1%	13.9%	20.2%	12.1%	12.5%	11.6%
Aerospace	490	3	0	4	2	1	500
Row Percent	98.0%	.6%	.0%	.8%	.4%	.2%	100.0%
Column Percent	2.6%	2.8%	.0%	1.6%	1.1%	6.3%	2.6%
Basic chemicals	1122	9	0	3	10	3	1147
Row Percent	97.8%	.8%	.0%	.3%	.9%	.3%	100.0%
Column Percent	5.9%	8.3%	.0%	1.2%	5.3%	18.8%	5.9%
Specialty chemicals	2899	12	0	28	23	3	2965
Row Percent	97.8%	.4%	.0%	.9%	.8%	.1%	100.0%
Column Percent	15.3%	11.0%	.0%	11.3%	12.1%	18.8%	15.2%
Agricultural chemicals	759	1	1	7	8	1	777
Row Percent	97.7%	.1%	.1%	.9%	1.0%	.1%	100.0%
Column Percent	4.0%	.9%	2.8%	2.8%	4.2%	6.3%	4.0%
Biochemical products	355	1	1	11	3	0	371
Row Percent	95.7%	.3%	.3%	3.0%	.8%	.0%	100.0%
Column Percent	1.9%	.9%	2.8%	4.4%	1.6%	.0%	1.9%
Coatings	834	3	0	11	10	0	858
Row Percent	97.2%	.3%	.0%	1.3%	1.2%	.0%	100.0%
Column Percent	4.4%	2.8%	.0%	4.4%	5.3%	.0%	4.4%
Electronics	705	5	1	12	7	1	731
Row Percent	96.4%	.7%	.1%	1.6%	1.0%	.1%	100.0%
Column Percent	3.7%	4.6%	2.8%	4.8%	3.7%	6.3%	3.7%
Food	630	2	0	13	6	0	651
Row Percent	96.8%	.3%	.0%	2.0%	.9%	.0%	100.0%
Column Percent	3.3%	1.8%	.0%	5.2%	3.2%	.0%	3.3%
Glass	154	2	0	1	3	1	161
Row Percent	95.7%	1.2%	.0%	.6%	1.9%	.6%	100.0%
Column Percent	.8%	1.8%	.0%	.4%	1.6%	6.3%	.8%
Paper	250	1	0	1	3	1	256
Row Percent	97.7%	.4%	.0%	.4%	1.2%	.4%	100.0%
Column Percent	1.3%	.9%	.0%	.4%	1.6%	6.3%	1.3%

Table 8.5.2 (Continued)

EMPLOYER	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Petroleum	817	4	0	5	10	1	837
Row Percent	97.6%	.5%	.0%	.6%	1.2%	.1%	100.0%
Column Percent	4.3%	3.7%	.0%	2.0%	5.3%	6.3%	4.3%
Pharmaceuticals	3584	13	27	50	31	1	3706
Row Percent	96.7%	.4%	.7%	1.3%	.8%	.0%	100.0%
Column Percent	18.9%	11.9%	75.0%	20.2%	16.3%	6.3%	18.9%
Plastics	1019	7	0	6	11	0	1043
Row Percent	97.7%	.7%	.0%	.6%	1.1%	.0%	100.0%
Column Percent	5.4%	6.4%	.0%	2.4%	5.8%	.0%	5.3%
Rubber	320	0	0	4	3	0	327
Row Percent	97.9%	.0%	.0%	1.2%	.9%	.0%	100.0%
Column Percent	1.7%	.0%	.0%	1.6%	1.6%	.0%	1.7%
Soaps	277	0	0	4	5	0	286
Row Percent	96.9%	.0%	.0%	1.4%	1.7%	.0%	100.0%
Column Percent	1.5%	.0%	.0%	1.6%	2.6%	.0%	1.5%
Steel or ferrous metals	84	0	0	2	2	0	88
Row Percent	95.5%	.0%	.0%	2.3%	2.3%	.0%	100.0%
Column Percent	.4%	.0%	.0%	.8%	1.1	.0%	.4%
Other metals, minerals	252	0	0	2	3	0	257
Row Percent	98.1%	.0%	.0%	.8%	1.2%	.0%	100.0%
Column Percent	1.3%	.0%	.0%	.8%	1.6%	.0%	1.3%
Other manufactures	2264	11	1	34	27	1	2338
Row Percent	96.8%	.5%	.0%	1.5%	1.2%	.0%	100.0%
Column Percent	11.9%	10.1%	2.8%	13.7%	14.2%	6.3%	11.9%
Total	18966	109	36	248	190	16	19565
Row Percent	96.9%	.6%	.2%	1.3%	1.0%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.5.3

EMPLOYMENT STATUS OF ACADEMIC CHEMISTS
by PRINCIPAL EMPLOYER
1990 Survey of ACS Members

INTSTITUTIONAL TYPE	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
AA Degree	507	35	4	0	7	0	553
Row Percent	91.7%	6.3%	.7%	.0%	1.3%	.0%	100.0%
Column Percent	7.4%	18.6%	.7%	.0%	8.1%	.0%	7.1%
BS Degree	1660	46	7	9	19	3	1744
Row Percent	95.2%	2.6%	.4%	.5%	1.1%	.2%	100.0%
Column Percent	24.2%	24.5%	1.2%	17.6%	22.1%	37.5%	22.4%
MS Degree	730	23	10	6	3	0	772
Row Percent	94.6%	3.0%	1.3%	.8%	.4%	.0%	100.0%
Column Percent	10.6%	12.2%	1.7%	11.8%	3.5%	.0%	9.9%
PhD Degree	3429	74	530	31	48	4	4116
Row Percent	83.3%	1.8%	12.9%	.8%	1.2%	.1%	100.0%
Column Percent	49.9%	39.4%	90.1%	60.8%	55.8%	50.0%	52.9%
Medical school	541	10	37	5	9	1	603
Row Percent	89.7%	1.7%	6.1%	.8%	1.5%	.2%	100.0%
Column Percent	7.9%	5.3%	6.3%	9.8%	10.5%	12.5%	7.7%
Total	6867	188	588	51	86	8	7788
Row Percent	88.2%	2.4%	7.6%	.7%	1.1%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.6.1

EMPLOYMENT STATUS OF NON-ACADEMIC CHEMISTS
by WORK FUNCTION
1990 Survey of ACS Members

WORK FUNCTION	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
R&D Mgt	3649	11	1	49	32	1	3743
Row Percent	97.5%	.3%	.0%	1.3%	.9%	.0%	100.0%
Column Percent	14.8%	3.8%	.7%	15.2%	11.4%	3.8%	14.6%
Basic research	2971	25	120	39	29	2	3186
Row Percent	93.3%	.8%	3.8%	1.2%	.9%	.1%	100.0%
Column Percent	12.1%	8.7%	79.5%	12.1%	10.3%	7.7%	12.4%
Applied research	8117	59	25	79	73	6	8359
Row Percent	97.1%	.7%	.3%	.9%	.9%	.1%	100.0%
Column Percent	33.0%	20.6%	16.6%	24.5%	26.0%	23.1%	32.6%
General Mgt	1833	7	0	36	25	2	1903
Row Percent	96.3%	.4%	.0%	1.9%	1.3%	.1%	100.0%
Column Percent	7.4%	2.4%	.0%	11.2%	8.9%	7.7%	7.4%
Marketing	1350	15	0	23	18	4	1410
Row Percent	95.7%	1.1%	.0%	1.6%	1.3%	.3%	100.0%
Column Percent	5.5%	5.2%	.0%	7.1%	6.4%	15.4%	5.5%
Production	2169	11	0	34	30	5	2249
Row Percent	96.4%	.5%	.0%	1.5%	1.3%	.2%	100.0%
Column Percent	8.8%	3.8%	.0%	10.6%	10.7%	19.2%	8.8%
Health & Safety	1106	19	1	9	15	1	1151
Row Percent	96.1%	1.7%	.1%	.8%	1.3%	.1%	100.0%
Column Percent	4.5%	6.6%	.7%	2.8%	5.3%	3.8%	4.5%
Forensics	1120	15	0	13	17	0	1165
Row Percent	96.1%	1.3%	.0%	1.1%	1.5%	.0%	100.0%
Column Percent	4.6%	5.2%	.0%	4.0%	6.0%	.0%	4.5%
Teaching	44	1	0	1	1	1	48
Row Percent	91.7%	2.1%	.0%	2.1%	2.1%	2.1%	100.0%
Column Percent	.2%	.3%	.0%	.3%	.4%	3.8%	.2%
Writing	165	15	0	5	3	0	188
Row Percent	87.8%	8.0%	.0%	2.7%	1.6%	.0%	100.0%
Column Percent	.7%	5.2%	.0%	1.6%	1.1%	.0%	.7%
Chem info services	279	13	1	3	8	0	304
Row Percent	91.8%	4.3%	.3%	1.0%	2.6%	.0%	100.0%
Column Percent	1.1%	4.5%	.7%	.9%	2.8%	.0%	1.2%

Table 8.6.1 (Continued)

WORK FUNCTION	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Computers	218	7	0	7	2	0	234
Row Percent	93.2%	3.0%	.0%	3.0%	.9%	.0%	100.0%
Column Percent	.9%	2.4%	.0%	2.2%	.7%	.0%	.9%
Consulting	657	66	0	17	10	2	752
Row Percent	87.4%	8.8%	.0%	2.3%	1.3%	.3%	100.0%
Column Percent	2.7%	23.1%	.0%	5.3%	3.6%	7.7%	2.9%
Other	830	21	3	6	13	2	875
Row Percent	94.9%	2.4%	.3%	.7%	1.5%	.2%	100.0%
Column Percent	3.4%	7.3%	2.0%	1.9%	4.6%	7.7%	3.4%
No Answer	104	1	0	1	5	0	111
Row Percent	93.7%	.9%	.0%	.9%	4.5%	.0%	100.0%
Column Percent	.4%	.3%	.0%	.3%	1.8%	.0%	.4%
Total	24612	286	151	322	281	26	25678
Row Percent	95.8%	1.1%	.6%	1.3%	1.1%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.7.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by SPECIALTY
1990 Survey of ACS Members

WORK SPECIALITY	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Biochemistry	1905	36	176	23	18	1	2159
Row Percent	88.2%	1.7%	8.2%	1.1%	.8%	.0%	100.0%
Column Percent	5.9%	7.4%	23.1%	6.0%	4.6%	2.7%	6.3%
Biotechnology	713	8	23	14	7	2	767
Row Percent	93.0%	1.0%	3.0%	1.8%	.9%	.3%	100.0%
Column Percent	2.2%	1.6%	3.0%	3.7%	1.8%	5.4%	2.2%
General chemistry	1726	78	2	12	27	1	1846
Row Percent	93.5%	4.2%	.1%	.7%	1.5%	.1%	100.0%
Column Percent	5.3%	16.0%	.3%	3.1%	6.9%	2.7%	5.4%
Agricultural chemistry	1084	11	15	10	15	1	1136
Row Percent	95.4%	1.0%	1.3%	.9%	1.3%	.1%	100.0%
Column Percent	3.3%	2.2%	2.0%	2.6%	3.9%	2.7%	3.3%
Analytical chemistry	6454	65	46	68	88	5	6726
Row Percent	96.0%	1.0%	.7%	1.0%	1.3%	.1%	100.0%
Column Percent	19.9%	13.3%	6.0%	17.8%	22.6%	13.5%	19.5%
Clinical chemistry	381	8	5	9	6	1	410
Row Percent	92.9%	2.0%	1.2%	2.2%	1.5%	.2%	100.0%
Column Percent	1.2%	1.6%	.7%	2.4%	1.5%	2.7%	1.2%
Environmental chemistry	2785	43	15	36	25	3	2907
Row Percent	95.8%	1.5%	.5%	1.2%	.9%	.1%	100.0%
Column Percent	8.6%	8.8%	2.0%	9.4%	6.4%	8.1%	8.4%
Inorganic chemistry	1401	20	68	11	13	2	1515
Row Percent	92.5%	1.3%	4.5%	.7%	.9%	.1%	100.0%
Column Percent	4.3%	4.1%	8.9%	2.9%	3.3%	5.4%	4.4%
Materials science	1489	19	21	16	17	2	1564
Row Percent	95.2%	1.2%	1.3%	1.0%	1.1%	.1%	100.0%
Column Percent	4.6%	3.9%	2.8%	4.2%	4.4%	5.4%	4.5%
Medicinal-Pharmaceutical	1818	20	57	28	25	1	1949
Row Percent	93.3%	1.0%	2.9%	1.4%	1.3%	.1%	100.0%
Column Percent	5.6%	4.1%	7.5%	7.3%	6.4%	2.7%	5.7%

Table 8.7.1 (Continued)

WORK SPECIALITY	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Organic chemistry	4267	50	161	36	45	6	4565
Row Percent	93.5%	1.1%	3.5%	.8%	1.0%	.1%	100.0%
Column Percent	13.2%	10.2%	21.2%	9.4%	11.6%	16.2%	13.2%
Physical chemistry	1997	28	126	19	15	1	2186
Row Percent	91.4%	1.3%	5.8%	.9%	.7%	.0%	100.0%
Column Percent	6.2%	5.7%	16.6%	5.0%	3.9%	2.7%	6.3%
Polymer chemistry	3277	34	29	34	33	6	3413
Row Percent	96.0%	1.0%	.8%	1.0%	1.0%	.2%	100.0%
Column Percent	10.1%	7.0%	3.8%	8.9%	8.5%	16.2%	9.9%
Other chemical science	850	17	8	17	13	0	905
Row Percent	93.9%	1.9%	.9%	1.9%	1.4%	.0%	100.0%
Column Percent	2.6%	3.5%	1.1%	4.5%	3.3%	.0%	2.6%
Business Administration	824	11	0	23	13	2	873
Row Percent	94.4%	1.3%	.0%	2.6%	1.5%	.2%	100.0%
Column Percent	2.5%	2.2%	.0%	6.0%	3.3%	5.4%	2.5%
Other non-chem	1444	41	9	25	29	3	1551
Row Percent	93.1%	2.6%	.6%	1.6%	1.9%	.2%	100.0%
Column Percent	4.5%	8.4%	1.2%	6.6%	7.5%	8.1%	4.5%
Total	32415	489	761	381	389	37	34472
Row Percent	94.0%	1.4%	2.2%	1.1%	1.1%	.1%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.8.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by GEOGRAPHIC REGION
1990 Survey of ACS Members

GEOGRAPHIC REGION	EMPLOYMENT STATUS						Total
	Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	No Answer	
Pacific	827	35	124	5	6	1	998
Row Percent	82.9%	3.5%	12.4%	.5%	.6%	.1%	100.0%
Column Percent	12.2%	18.9%	21.3%	9.8%	7.9%	12.5%	13.0%
Mountain	397	12	37	6	9	0	461
Row Percent	86.1%	2.6%	8.0%	1.3%	2.0%	.0%	100.0%
Column Percent	5.8%	6.5%	6.4%	11.8%	11.8%	.0%	6.0%
West North Central	652	20	36	6	5	2	721
Row Percent	90.4%	2.8%	5.0%	.8%	.7%	.3%	100.0%
Column Percent	9.6%	10.8%	6.2%	11.8%	6.6%	25.0%	9.4%
West South Central	596	9	41	4	5	0	655
Row Percent	91.0%	1.4%	6.3%	.6%	.8%	.0%	100.0%
Column Percent	8.8%	4.9%	7.0%	7.8%	6.6%	.0%	8.5%
East North Central	1215	37	76	7	14	1	1350
Row Percent	90.0%	2.7%	5.6%	.5%	1.0%	.1%	100.0%
Column Percent	17.9%	20.0%	13.1%	13.7%	18.4%	12.5%	17.5%
East South Central	390	5	17	2	2	0	416
Row Percent	93.8%	1.2%	4.1%	.5%	.5%	.0%	100.0%
Column Percent	5.7%	2.7%	2.9%	3.9%	2.6%	.0%	5.4%
Middle Atlantic	1139	32	100	15	15	1	1302
Row Percent	87.5%	2.5%	7.7%	1.2%	1.2%	.1%	100.0%
Column Percent	16.7%	17.3%	17.2%	29.4%	19.7%	12.5%	16.9%
South Atlantic	1068	24	74	2	13	2	1183
Row Percent	90.3%	2.0%	6.3%	.2%	1.1%	.2%	100.0%
Column Percent	15.7%	13.0%	12.7%	3.9%	17.1%	25.0%	15.4%
New England	516	11	77	4	7	1	616
Row Percent	83.8%	1.8%	12.5%	.6%	1.1%	.2%	100.0%
Column Percent	7.6%	5.9%	13.2%	7.8%	9.2%	12.5%	8.0%
Total	6867	188	588	51	86	8	7788
Row Percent	89.1%	2.4%	7.6%	.7%	1.1%	.1%	101.1%
Column Percent	100.9%	101.6%	101.0%	100.0%	113.2%	100.0%	101.1%

Table 9.1.1

LENGTH OF UNEMPLOYMENT OF CHEMISTS UNEMPLOYED on MARCH 1, 1990
by HIGHEST DEGREE
1990 Survey of ACS Members

HIGHEST DEGREE	LENGTH OF UNEMPLOYMENT						Total
	Less than 1 mo	1-3 mos	4-6 mos	7-12 mos	More than 1 yr	No Answer	
BS	21	28	21	13	18	0	101
Row Percent	20.8%	27.7%	20.8%	12.9%	17.8%	.0%	100.0%
Column Percent	39.6%	26.7%	25.9%	19.1%	24.7%	.0%	26.5%
MS	13	17	15	8	18	1	72
Row Percent	18.1%	23.6%	20.8%	11.1%	25.0%	1.4%	100.0%
Column Percent	24.5%	16.2%	18.5%	11.8%	24.7%	100.0%	18.9%
PhD	19	60	45	47	36	0	207
Row Percent	9.2%	29.0%	21.7%	22.7%	17.4%	.0%	100.0%
Column Percent	35.8%	57.1%	55.6%	69.1%	49.3%	.0%	54.3%
No Answer	0	0	0	0	1	0	1
Row Percent	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
Column Percent	.0%	.0%	.0%	.0%	1.4%	.0%	.3%
Total	53	105	81	68	73	1	381
Row Percent	13.9%	27.6%	21.3%	17.8%	19.2%	.3%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 9.2.1

LENGTH OF UNEMPLOYMENT OF CHEMISTS UNEMPLOYED on MARCH 1, 1990
by AGE
1990 Survey of ACS Members

AGE	LENGTH OF UNEMPLOYMENT						Total
	Less than 1 mo	1-3 mos	4-6 mos	7-12 mos	More than 1 yr	No Answer	
20-24	1	3	3	0	0	0	7
Row Percent	14.3%	42.9%	42.9%	.0%	.0%	.0%	100.0%
Column Percent	1.9%	2.9%	3.7%	.0%	.0%	.0%	1.8%
25-29	7	5	3	6	2	0	23
Row Percent	30.4%	21.7%	13.0%	26.1%	8.7%	.0%	100.0%
Column Percent	13.2%	4.8%	3.7%	8.8%	2.7%	.0%	6.0%
30-34	2	21	14	10	4	0	51
Row Percent	3.9%	41.2%	27.5%	19.6%	7.8%	.0%	100.0%
Column Percent	3.8%	20.0%	17.3%	14.7%	5.5%	.0%	13.4%
35-39	8	13	11	7	10	0	49
Row Percent	16.3%	26.5%	22.4%	14.3%	20.4%	.0%	100.0%
Column Percent	15.1%	12.4%	13.6%	10.3%	13.7%	.0%	12.9%
40-44	12	17	11	10	8	0	58
Row Percent	20.7%	29.3%	19.0%	17.2%	13.8%	.0%	100.0%
Column Percent	22.6%	16.2%	13.6%	14.7%	11.0%	.0%	15.2%
45-49	7	14	12	4	14	1	52
Row Percent	13.5%	26.9%	23.1%	7.7%	26.9%	1.9%	100.0%
Column Percent	13.2%	13.3%	14.8%	5.9%	19.2%	100.0%	13.6%
40-54	6	12	13	11	12	0	54
Row Percent	11.1%	22.2%	24.1%	20.4%	22.2%	.0%	100.0%
Column Percent	11.3%	11.4%	16.0%	16.2%	16.4%	.0%	14.2%
55-59	3	10	6	6	11	0	36
Row Percent	8.3%	27.8%	16.7%	16.7%	30.6%	.0%	100.0%
Column Percent	5.7%	9.5%	7.4%	8.8%	15.1%	.0%	9.4%
60-64	4	4	5	6	6	0	25
Row Percent	16.0%	16.0%	20.0%	24.0%	24.0%	.0%	100.0%
Column Percent	7.5%	3.8%	6.2%	8.8%	8.2%	.0%	6.6%
65-69	1	2	0	1	0	0	4
Row Percent	25.0%	50.0%	.0%	25.0%	.0%	.0%	100.0%
Column Percent	1.9%	1.9%	.0%	1.5%	.0%	.0%	1.0%
No Answer	2	4	3	7	6	0	22
Row Percent	9.1%	18.2%	13.6%	31.8%	27.3%	.0%	100.0%
Column Percent	3.8%	3.8%	3.7%	10.3%	8.2%	.0%	5.8%
Total	53	105	81	68	73	1	381
Row Percent	13.9%	27.6%	21.3%	17.8%	19.2%	.3%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 9.3.1

LENGTH OF UNEMPLOYMENT OF CHEMISTS UNEMPLOYED on MARCH 1, 1990
by WORK FUNCTION
1990 Survey of ACS Members

WORK FUNCTION	LENGTH OF UNEMPLOYMENT					Total
	Less than 1 mo	1-3 mos	4-6 mos	7-12 mos	More than 1 yr	
R&D Mgt	4	17	9	9	10	49
Row Percent	8.2%	34.7%	18.4%	18.4%	20.4%	100.0%
Column Percent	8.5%	18.5%	13.2%	17.6%	15.6%	15.2%
Basic research	8	16	5	5	5	39
Row Percent	20.5%	41.0%	12.8%	12.8%	12.8%	100.0%
Column Percent	17.0%	17.4%	7.4%	9.8%	7.8%	12.1%
Applied research	9	25	16	12	17	79
Row Percent	11.4%	31.6%	20.3%	15.2%	21.5%	100.0%
Column Percent	19.1%	27.2%	23.5%	23.5%	26.6%	24.5%
General Mgt	8	7	8	5	8	36
Row Percent	22.2%	19.4%	22.2%	13.9%	22.2%	100.0%
Column Percent	17.0%	7.6%	11.8%	9.8%	12.5%	11.2%
Marketing	1	8	5	3	6	23
Row Percent	4.3%	34.8%	21.7%	13.0%	26.1%	100.0%
Column Percent	2.1%	8.7%	7.4%	5.9%	9.4%	7.1%
Production	6	10	9	6	3	34
Row Percent	17.6%	29.4%	26.5%	17.6%	8.8%	100.0%
Column Percent	12.8%	10.9%	13.2%	11.8%	4.7%	10.6%
Health & Safety	2	2	2	2	1	9
Row Percent	22.2%	22.2%	22.2%	22.2%	11.1%	100.0%
Column Percent	4.3%	2.2%	2.9%	3.9%	1.6%	2.8%
Forensics	5	1	3	3	1	13
Row Percent	38.5%	7.7%	23.1%	23.1%	7.7%	100.0%
Column Percent	10.6%	1.1%	4.4%	5.9%	1.6%	4.0%
Teaching	0	0	0	0	1	1
Row Percent	.0%	.0%	.0%	.0%	100.0%	100.0%
Column Percent	.0%	.0%	.0%	.0%	1.6%	.3%
Writing	1	1	2	1	0	5
Row Percent	20.0%	20.0%	40.0%	20.0%	.0%	100.0%
Column Percent	2.1%	1.1%	2.9%	2.0%	.0%	1.6%
Chem info services	1	1	0	0	1	3
Row Percent	33.3%	33.3%	.0%	.0%	33.3%	100.0%
Column Percent	2.1%	1.1%	.0%	.0%	1.6%	.9%

Table 9.3.1 (Continued)

WORK FUNCTION	LENGTH OF UNEMPLOYMENT					Total
	Less than 1 mo	1-3 mos	4-6 mos	7-12 mos	More than 1 yr	
Computers	1	0	2	2	2	7
Row Percent	14.3%	.0%	28.6%	28.6%	28.6%	100.0%
Column Percent	2.1%	.0%	2.9%	3.9%	3.1%	2.2%
Consulting	1	3	4	2	7	17
Row Percent	5.9%	17.6%	23.5%	11.8%	41.2%	100.0%
Column Percent	2.1%	3.3%	5.9%	3.9%	10.9%	5.3%
Other	0	1	2	1	2	6
Row Percent	.0%	16.7%	33.3%	16.7%	33.3%	100.0%
Column Percent	.0%	1.1%	2.9%	2.0%	3.1%	1.9%
No Answer	0	0	1	0	0	1
Row Percent	.0%	.0%	100.0%	.0%	.0%	100.0%
Column Percent	.0%	.0%	1.5%	.0%	.0%	.3%
Total	47	92	68	51	64	322
Row Percent	14.6%	28.6%	21.1%	15.8%	19.9%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 9.4.1

LENGTH OF UNEMPLOYMENT OF CHEMISTS UNEMPLOYED on MARCH 1, 1990
by SPECIALTY
1990 Survey of ACS Members

WORK SPECIALTY	LENGTH OF UNEMPLOYMENT						Total
	Less than 1 mo	1-3 mos	4-6 mos	7-12 mos	More than 1 yr	No Answer	
Biochemistry	2	6	7	5	3	0	23
Row Percent	8.7%	26.1%	30.4%	21.7%	13.0%	.0%	100.0%
Column Percent	3.8%	5.7%	8.6%	7.4%	4.1%	.0%	6.0%
Biotechnology	1	5	1	5	2	0	14
Row Percent	7.1%	35.7%	7.1%	35.7%	14.3%	.0%	100.0%
Column Percent	1.9%	4.8%	1.2%	7.4%	2.7%	.0%	3.7%
General chemistry	3	1	4	2	2	0	12
Row Percent	25.0%	8.3%	33.3%	16.7%	16.7%	.0%	100.0%
Column Percent	5.7%	1.0%	4.9%	2.9%	2.7%	.0%	3.1%
Agricultural chemistry	3	1	4	1	1	0	10
Row Percent	30.0%	10.0%	40.0%	10.0%	10.0%	.0%	100.0%
Column Percent	5.7%	1.0%	4.9%	1.5%	1.4%	.0%	2.6%
Analytical chemistry	12	21	13	7	15	0	68
Row Percent	17.6%	30.9%	19.1%	10.3%	22.1%	.0%	100.0%
Column Percent	22.6%	20.0%	16.0%	10.3%	20.5%	.0%	17.8%
Clinical chemistry	2	2	0	3	2	0	9
Row Percent	22.2%	22.2%	.0%	33.3%	22.2%	.0%	100.0%
Column Percent	3.8%	1.9%	.0%	4.4%	2.7%	.0%	2.4%
Environmental chemistry	6	8	9	6	7	0	36
Row Percent	16.7%	22.2%	25.0%	16.7%	19.4%	.0%	100.0%
Column Percent	11.3%	7.6%	11.1%	8.8%	9.6%	.0%	9.4%
Inorganic chemistry	0	1	3	6	1	0	11
Row Percent	.0%	9.1%	27.3%	54.5%	9.1%	.0%	100.0%
Column Percent	.0%	1.0%	3.7%	8.8%	1.4%	.0%	2.9%
Materials science	1	0	4	8	3	0	16
Row Percent	6.3%	.0%	25.0%	50.0%	18.8%	.0%	100.0%
Column Percent	1.9%	.0%	4.9%	11.8%	4.1%	.0%	4.2%
Medicinal/Pharmaceutical	4	12	5	4	3	0	28
Row Percent	14.3%	42.9%	17.9%	14.3%	10.7%	.0%	100.0%
Column Percent	7.5%	11.4%	6.2%	5.9%	4.1%	.0%	7.3%

Table 9.4.1 (Continued)

WORK SPECIALTY	LENGTH OF UNEMPLOYMENT						Total
	Less than 1 mo	1-3 mos	4-6 mos	7-12 mos	More than 1 yr	No Answer	
Organic chemistry	5	14	8	1	7	1	36
Row Percent	13.9%	38.9%	22.2%	2.8%	19.4%	2.8%	100.0%
Column Percent	9.4%	13.3%	9.9%	1.5%	9.6%	100.0%	9.4%
Physical chemistry	2	6	1	8	2	0	19
Row Percent	10.5%	31.6%	5.3%	42.1%	10.5%	.0%	100.0%
Column Percent	3.8%	5.7%	1.2%	11.8%	2.7%	.0%	5.0%
Polymer chemistry	4	12	6	4	8	0	34
Row Percent	11.8%	35.3%	17.6%	11.8%	23.5%	.0%	100.0%
Column Percent	7.5%	11.4%	7.4%	5.9%	11.0%	.0%	8.9%
Other chemical science	1	3	7	1	5	0	17
Row Percent	5.9%	17.6%	41.2%	5.9%	29.4%	.0%	100.0%
Column Percent	1.9%	2.9%	8.6%	1.5%	6.8%	.0%	4.5%
Business Administration	3	6	5	2	7	0	23
Row Percent	13.0%	26.1%	21.7%	8.7%	30.4%	.0%	100.0%
Column Percent	5.7%	5.7%	6.2%	2.9%	9.6%	.0%	6.0%
Other non-chem	4	7	4	5	5	0	25
Row Percent	16.0%	28.0%	16.0%	20.0%	20.0%	.0%	100.0%
Column Percent	7.5%	6.7%	4.9%	7.4%	6.8%	.0%	6.6%
Total	53	105	81	68	73	1	381
Row Percent	13.9%	27.6%	21.3%	17.8%	19.2%	.3%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 9.5.1

LENGTH OF UNEMPLOYMENT OF CHEMISTS UNEMPLOYED on MARCH 1, 1990
by GEOGRAPHIC REGION
1990 Survey of ACS Members

GEOGRAPHIC REGION	LENGTH OF UNEMPLOYMENT					Total
	Less than 1 mo	1-3 mos	4-6 mos	7-12 mos	More than 1 yr	
Pacific	7	12	10	9	12	50
Row Percent	14.0%	24.0%	20.0%	18.0%	24.0%	100.0%
Column Percent	15.6%	13.2%	15.2%	18.8%	20.7%	16.2%
Mountain	2	1	2	2	1	8
Row Percent	25.0%	12.5%	25.0%	25.0%	12.5%	100.0%
Column Percent	4.4%	1.1%	3.0%	4.2%	1.7%	2.6%
West North Central	2	4	2	2	4	14
Row Percent	14.3%	28.6%	14.3%	14.3%	28.6%	100.0%
Column Percent	4.4%	4.4%	3.0%	4.2%	6.9%	4.5%
West South Central	1	0	8	2	2	13
Row Percent	7.7%	.0%	61.5%	15.4%	15.4%	100.0%
Column Percent	2.2%	.0%	12.1%	4.2%	3.4%	4.2%
East North Central	10	12	7	9	13	51
Row Percent	19.6%	23.5%	13.7%	17.6%	25.5%	100.0%
Column Percent	22.2%	13.2%	10.6%	18.8%	22.4%	16.6%
East South Central	2	2	1	2	0	7
Row Percent	28.6%	28.6%	14.3%	28.6%	.0%	100.0%
Column Percent	4.4%	2.2%	1.5%	4.2%	.0%	2.3%
Middle Atlantic	12	27	19	8	17	83
Row Percent	14.5%	32.5%	22.9%	9.6%	20.5%	100.0%
Column Percent	26.7%	29.7%	28.8%	16.7%	29.3%	26.9%
South Atlantic	4	22	12	7	4	49
Row Percent	8.2%	44.9%	24.5%	14.3%	8.2%	100.0%
Column Percent	8.9%	24.2%	18.2%	14.6%	6.9%	15.9%
New England	5	11	5	7	5	33
Row Percent	15.2%	33.3%	15.2%	21.2%	15.2%	100.0%
Column Percent	11.1%	12.1%	7.6%	14.6%	8.6%	10.7%
Total	47	92	68	51	64	322
Row Percent	15.3%	29.9%	22.1%	16.6%	20.8%	104.5%
Column Percent	104.4%	101.1%	103.0%	106.3%	110.3%	104.5%

Table 10.1.1

ALL RESPONDENTS
by SEX and HIGHEST DEGREE
1990 Survey of ACS Members

SEX	HIGHEST DEGREE				Total
	BS	MS	PhD	No Answer	
Men	7076	5540	19315	169	32100
Row Percent	22.0%	17.3%	60.2%	.5%	100.0%
Column Percent	73.3%	75.5%	87.4%	74.1%	81.6%
Women	2524	1764	2695	58	7041
Row Percent	35.8%	25.1%	38.3%	.8%	100.0%
Column Percent	26.1%	24.0%	12.2%	25.4%	17.9%
No Answer	58	38	97	1	194
Row Percent	29.9%	19.6%	50.0%	.5%	100.0%
Column Percent	.6%	.5%	.4%	.4%	.5%
Total	9658	7342	22107	228	39335
Row Percent	24.6%	18.7%	56.2%	.6%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.2.1

ALL RESPONDENTS
by AGE and HIGHEST DEGREE
1990 Survey of ACS Members

AGE	HIGHEST DEGREE				Total
	BS	MS	PhD	No Answer	
20-29	2224	698	1127	19	4068
Row Percent	54.7%	17.2%	27.7%	.5%	100.0%
Column Percent	23.0%	9.5%	5.1%	8.3%	10.3%
30-39	3092	2317	6570	53	12032
Row Percent	25.7%	19.3%	54.6%	.4%	100.0%
Column Percent	32.0%	31.6%	29.7%	23.1%	30.6%
40-49	1725	2039	6709	59	10532
Row Percent	16.4%	19.4%	63.7%	.6%	100.0%
Column Percent	17.9%	27.8%	30.3%	25.8%	26.8%
50-59	1382	1300	4783	50	7515
Row Percent	18.4%	17.3%	63.6%	.7%	100.0%
Column Percent	14.3%	17.7%	21.6%	21.8%	19.1%
60-69	806	677	2024	36	3543
Row Percent	22.7%	19.1%	57.1%	1.0%	100.0%
Column Percent	8.3%	9.2%	9.2%	15.7%	9.0%
70 or more	3	3	7	0	13
Row Percent	23.1%	23.1%	53.8%	.0%	100.0%
Column Percent	.0%	.0%	.0%	.0%	.0%
No Answer	426	308	887	12	1633
Row Percent	26.1%	18.9%	54.3%	.7%	100.0%
Column Percent	4.4%	4.2%	4.0%	5.2%	4.2%
Total	9658	7342	22107	229	39336
Row Percent	24.6%	18.7%	56.2%	.6%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.3.1

ALL RESPONDENTS
by WORK SPECIALTY and HIGHEST DEGREE
1990 Survey of ACS Members

WORK SPECIALTY	HIGHEST DEGREE				Total
	BS	MS	PhD	No Answer	
Chemical engineering	546	574	976	12	2108
Row Percent	25.9%	27.2%	46.3%	.6%	100.0%
Column Percent	5.7%	7.8%	4.4%	5.2%	5.4%
Biochemistry	172	183	1802	9	2166
Row Percent	7.9%	8.4%	83.2%	.4%	100.0%
Column Percent	1.8%	2.5%	8.2%	3.9%	5.5%
Biotechnology	114	121	537	2	774
Row Percent	14.7%	15.6%	69.4%	.3%	100.0%
Column Percent	1.2%	1.6%	2.4%	.9%	2.0%
General chemistry	463	584	792	17	1856
Row Percent	24.9%	31.5%	42.7%	.9%	100.0%
Column Percent	4.8%	8.0%	3.6%	7.4%	4.7%
Agricultural chemistry	293	183	659	3	1138
Row Percent	25.7%	16.1%	57.9%	.3%	100.0%
Column Percent	3.0%	2.5%	3.0%	1.3%	2.9%
Analytical chemistry	2641	1410	2664	43	6758
Row Percent	39.1%	20.9%	39.4%	.6%	100.0%
Column Percent	27.3%	19.2%	12.1%	18.8%	17.2%
Clinical chemistry	85	68	257	2	412
Row Percent	20.6%	16.5%	62.4%	.5%	100.0%
Column Percent	.9%	.9%	1.2%	.9%	1.0%
Environmental chemistry	1215	694	992	26	2927
Row Percent	41.5%	23.7%	33.9%	.9%	100.0%
Column Percent	12.6%	9.5%	4.5%	11.4%	7.4%
Inorganic chemistry	182	137	1195	4	1518
Row Percent	12.0%	9.0%	78.7%	.3%	100.0%
Column Percent	1.9%	1.9%	5.4%	1.7%	3.9%
Materials science	334	269	954	11	1568
Row Percent	21.3%	17.2%	60.8%	.7%	100.0%
Column Percent	3.5%	3.7%	4.3%	4.8%	4.0%

Table 10.3.1 (Continued)

WORK SPECIALTY	HIGHEST DEGREE BS	MS	PhD	No Answer	Total
Medicinal/Pharma-ceutical	364	332	1252	7	1955
Row Percent	18.6%	17.0%	64.0%	.4%	100.0%
Column Percent	3.8%	4.5%	5.7%	3.1%	5.0%
Organic chemistry	694	561	3308	23	4586
Row Percent	15.1%	12.2%	72.1%	.5%	100.0%
Column Percent	7.2%	7.6%	15.0%	10.0%	11.7%
Physical chemistry	126	125	1941	6	2198
Row Percent	5.7%	5.7%	88.3%	.3%	100.0%
Column Percent	1.3%	1.7%	8.8%	2.6%	5.6%
Polymer chemistry	844	570	1995	16	3425
Row Percent	24.6%	16.6%	58.2%	.5%	100.0%
Column Percent	8.7%	7.8%	9.0%	7.0%	8.7%
Other chemical science	211	229	466	3	909
Row Percent	23.2%	25.2%	51.3%	.3%	100.0%
Column Percent	2.2%	3.1%	2.1%	1.3%	2.3%
Business Administration	326	440	477	6	1249
Row Percent	26.1%	35.2%	38.2%	.5%	100.0%
Column Percent	3.4%	6.0%	2.2%	2.6%	3.2%
Other non-chem	549	559	1107	13	2228
Row Percent	24.6%	25.1%	49.7%	.6%	100.0%
Column Percent	5.7%	7.6%	5.0%	5.7%	5.7%
No Answer	499	303	733	26	1561
Row Percent	32.0%	19.4%	47.0%	1.7%	100.0%
Column Percent	5.2%	4.1%	3.3%	11.4%	4.0%
Total	9658	7342	22107	229	39336
Row Percent	24.6%	18.7%	56.2%	.6%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.4.1

ALL RESPONDENTS
by RACE/ETHNICITY and HIGHEST DEGREE
1990 Survey of ACS Members

RACE OR ETHNIC GROUP	HIGHEST DEGREE				Total
	BS	MS	PhD	No Answer	
American Indian	63	19	57	1	140
Row Percent	45.0%	13.6%	40.7%	.7%	100.0%
Column Percent	.7%	.3%	.3%	.5%	.4%
Asian	284	374	1839	14	2511
Row Percent	11.3%	14.9%	73.2%	.6%	100.0%
Column Percent	3.1%	5.3%	8.7%	6.6%	6.7%
Black	150	89	182	4	425
Row Percent	35.3%	20.9%	42.8%	.9%	100.0%
Column Percent	1.6%	1.3%	.9%	1.9%	1.1%
Hispanic	105	65	168	1	339
Row Percent	31.0%	19.2%	49.6%	.3%	100.0%
Column Percent	1.1%	.9%	.8%	.5%	.9%
White	8547	6407	18802	191	33947
Row Percent	25.2%	18.9%	55.4%	.6%	100.0%
Column Percent	92.3%	91.0%	88.6%	89.7%	89.9%
Other	112	85	183	2	382
Row Percent	29.3%	22.3%	47.9%	.5%	100.0%
Column Percent	1.2%	1.2%	.9%	.9%	1.0%
No Answer	397	303	876	16	1592
Row Percent	24.9%	19.0%	55.0%	1.0%	100.0%
Column Percent	4.1%	4.1%	4.0%	7.0%	4.0%
Total	9658	7342	22107	229	39336
Row Percent	24.6%	18.7%	56.2%	.6%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.5.1

ALL RESPONDENTS
by RACE/ETHNICITY and SEX
1990 Survey of ACS Members

RACE OR ETHNIC GROUP	SEX			Total
	Men	Women	No Answer	
American Indian	103	37	0	140
Row Percent	73.6%	26.4%	.0%	100.0%
Column Percent	.3%	.5%	.0%	.4%
Asian	2029	479	3	2511
Row Percent	80.8%	19.1%	.1%	100.0%
Column Percent	6.6%	7.0%	5.4%	6.7%
Black	293	130	2	425
Row Percent	68.9%	30.6%	.5%	100.0%
Column Percent	.9%	1.9%	3.6%	1.1%
Hispanic	262	77	0	339
Row Percent	77.3%	22.7%	.0%	100.0%
Column Percent	.8%	1.1%	.0%	.9%
White	27866	6031	50	33947
Row Percent	82.1%	17.8%	.1%	100.0%
Column Percent	90.3%	88.3%	89.3%	89.9%
Other	305	76	1	382
Row Percent	79.8%	19.9%	.3%	100.0%
Column Percent	1.0%	1.1%	1.8%	1.0%
No Answer	1242	211	138	1591
Row Percent	78.1%	13.3%	8.7%	100.0%
Column Percent	3.9%	3.0%	71.1%	4.0%
Total	32100	7041	194	39335
Row Percent	81.6%	17.9%	.5%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%

Table 10.6.1

ALL RESPONDENTS
by RACE/ETHNICITY and CITIZENSHIP
1990 Survey of ACS Members

RACE OR ETHNIC GROUP	CITIZENSHIP OR VISA STATUS					Total
	Native	Naturalized	Perm Res	Other visa	No Answer	
American Indian	139	0	0	1	0	140
Row Percent	99.3%	.0%	.0%	.7%	.0%	100.0%
Column Percent	.4%	.0%	.0%	.2%	.0%	.4%
Asian	459	1208	604	238	2	2511
Row Percent	18.3%	48.1%	24.1%	9.5%	.1%	100.0%
Column Percent	1.4%	43.0%	40.6%	51.0%	15.4%	6.7%
Black	339	37	39	10	0	425
Row Percent	79.8%	8.7%	9.2%	2.4%	.0%	100.0%
Column Percent	1.0%	1.3%	2.6%	2.1%	.0%	1.1%
Hispanic	200	95	33	11	0	339
Row Percent	59.0%	28.0%	9.7%	3.2%	.0%	100.0%
Column Percent	.6%	3.4%	2.2%	2.4%	.0%	.9%
White	31588	1386	767	195	11	33947
Row Percent	93.1%	4.1%	2.3%	.6%	.0%	100.0%
Column Percent	95.8%	49.3%	51.5%	41.8%	84.6%	89.9%
Other	241	84	45	12	0	382
Row Percent	63.1%	22.0%	11.8%	3.1%	.0%	100.0%
Column Percent	.7%	3.0%	3.0%	2.6%	.0%	1.0%
No Answer	1327	76	41	8	139	1591
Row Percent	83.4%	4.8%	2.6%	.5%	8.7%	100.0%
Column Percent	3.9%	2.6%	2.7%	1.7%	91.4%	4.0%
Total	34293	2886	1529	475	152	39335
Row Percent	87.2%	7.3%	3.9%	1.2%	.4%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.7.1

ALL RESPONDENTS
by GEOGRAPHIC REGION and AGE
1990 Survey of ACS Members

GEOGRAPHIC REGION	AGE							Total
	20-29	30-39	40-49	50-59	60-69	70 or more	No Answer	
Pacific	478	1536	1277	841	390	3	201	4726
Row Percent	10.1%	32.5%	27.0%	17.8%	8.3%	.1%	4.3%	100.0%
Column Percent	11.8%	12.8%	12.1%	11.2%	11.0%	23.1%	12.3%	12.0%
Mountain	133	549	475	277	115	0	41	1590
Row Percent	8.4%	34.5%	29.9%	17.4%	7.2%	.0%	2.6%	100.0%
Column Percent	3.3%	4.6%	4.5%	3.7%	3.2%	.0%	2.5%	4.0%
West North Central	265	802	638	455	204	0	96	2460
Row Percent	10.8%	32.6%	25.9%	18.5%	8.3%	.0%	3.9%	100.0%
Column Percent	6.5%	6.7%	6.1%	6.1%	5.8%	.0%	5.9%	6.3%
West South Central	266	878	785	614	260	0	114	2917
Row Percent	9.1%	30.1%	26.9%	21.0%	8.9%	.0%	3.9%	100.0%
Column Percent	6.5%	7.3%	7.5%	8.2%	7.3%	.0%	7.0%	7.4%
East North Central	866	2352	2036	1435	623	4	303	7619
Row Percent	11.4%	30.9%	26.7%	18.8%	8.2%	.1%	4.0%	100.0%
Column Percent	21.3%	19.5%	19.3%	19.1%	17.6%	30.8%	18.6%	19.4%
East South Central	135	412	420	308	121	0	59	1455
Row Percent	9.3%	28.3%	28.9%	21.2%	8.3%	.0%	4.1%	100.0%
Column Percent	3.3%	3.4%	4.0%	4.1%	3.4%	.0%	3.6%	3.7%
Middle Atlantic	882	2581	2257	1698	859	4	376	8657
Row Percent	10.2%	29.8%	26.1%	19.6%	9.9%	.0%	4.3%	100.0%
Column Percent	21.7%	21.5%	21.4%	22.6%	24.2%	30.8%	23.0%	22.0%

Table 10.7.1 (Continued)

GEOGRAPHIC REGION	AGE							Total
	20-29	30-39	40-49	50-59	60-69	70 or more	No Answer	
South Atlantic	649	1916	1778	1262	631	1	273	6510
Row Percent	10.0%	29.4%	27.3%	19.4%	9.7%	.0%	4.2%	100.0%
Column Percent	16.0%	15.9%	16.9%	16.8%	17.8%	7.7%	16.7%	16.5%
New England	351	892	761	536	255	0	108	2903
Row Percent	12.1%	30.7%	26.2%	18.5%	8.8%	.0%	3.7%	100.0%
Column Percent	8.6%	7.4%	7.2%	7.1%	7.2%	.0%	6.6%	7.4%
No Answer	43	114	105	89	85	1	62	499
Row Percent	8.6%	22.8%	21.0%	17.8%	17.0%	.2%	12.4%	100.0%
Column Percent	1.1%	.9%	1.0%	1.2%	2.4%	7.7%	3.8%	1.3%
Total	4068	12032	10532	7515	3543	13	1633	39336
Row Percent	10.3%	30.6%	26.8%	19.1%	9.0%	.0%	4.2%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.8.1

ALL RESPONDENTS
by GEOGRAPHIC REGION and WORK FUNCTION
1990 Survey of ACS Members

WORK FUNCTION	GEOGRAPHIC REGION										Total
	Pacific	Mount	WN Central	WS Central	EN Central	ES Central	Middle Atl	S Alt	New England	No Answer	
R&D Mgt	481	124	220	233	855	115	1115	765	305	49	4262
Row Percent	11.3%	2.9%	5.2%	5.5%	20.1%	2.7%	26.2%	17.9%	7.2%	1.1%	100.0%
Column Percent	10.2%	7.8%	9.0%	8.0%	11.2%	7.9%	12.9%	11.8%	10.5%	9.8%	10.9%
Basic research	414	117	168	156	627	73	1027	646	227	41	3496
Row Percent	11.8%	3.3%	4.8%	4.5%	17.9%	2.1%	29.4%	18.5%	6.5%	1.2%	100.0%
Column Percent	8.8%	7.4%	6.9%	5.4%	8.2%	5.0%	11.9%	9.9%	7.8%	8.2%	8.9%
Applied research	1033	294	555	682	2127	280	2320	1441	688	104	9524
Row Percent	10.8%	3.1%	5.8%	7.2%	22.3%	2.9%	24.4%	15.1%	7.2%	1.1%	100.0%
Column Percent	21.9%	18.5%	22.6%	23.4%	27.9%	19.3%	26.8%	22.2%	23.7%	20.9%	24.3%
General Mgt	311	109	135	193	411	98	489	479	169	34	2428
Row Percent	12.8%	4.5%	5.6%	7.9%	16.9%	4.0%	20.1%	19.7%	7.0%	1.4%	100.0%
Column Percent	6.6%	6.9%	5.5%	6.6%	5.4%	6 7%	5.7%	7.4%	5.8%	6.8%	6.2%
Marketing	224	47	62	183	367	58	424	234	165	27	1791
Row Percent	12.5%	2.6%	3.5%	10.2%	20.5%	3.2%	23.7%	13.1%	9.2%	1.5%	100.0%
Column Percent	4.7%	3.0%	2.5%	6.3%	4.8%	4.0%	4.9%	3.6%	5.7%	5.4%	4.6%
Production	258	115	210	258	495	146	503	380	175	37	2577
Row Percent	10.0%	4.5%	8.1%	10.0%	19.2%	5.7%	19.5%	14.7%	6.8%	1.4%	100.0%
Column Percent	5.5%	7.2%	8.6%	8.9%	6.5%	10.0%	5.8%	5.8%	6.0%	7.4%	6.6%
Health & Safety	178	56	70	93	227	48	275	303	82	13	1345
Row Percent	13.2%	4.2%	5.2%	6.9%	16.9%	3.6%	20.4%	22.5%	6.1%	1.0%	100.0%
Column Percent	3.8%	3.5%	2.9%	3.2%	3.0%	3.3%	3.2%	4.7%	2.8%	2.6%	3.4%
Forensics	194	71	64	99	265	49	202	185	85	13	1227
Row Percent	15.8%	5.8%	5.2%	8.1%	21.6%	4.0%	16.5%	15.1%	6.9%	1.1%	100.0%
Column Percent	4.1%	4.5%	2.6%	3.4%	3.5%	3.4%	2.3%	2.8%	2.9%	2.6%	3.1%

Table 10.8.1 (Continued)

WORK FUNCTION	GEOGRAPHIC REGION										Total
	Pacific	Mount	WN Central	WS Central	EN Central	ES Central	Middle Atl	S Alt	New England	No Answer	
Teaching	25	13	17	18	40	11	28	33	17	4	206
Row Percent	12.1%	6.3%	8.3%	8.7%	19.4%	5.3%	13.6%	16.0%	8.3%	1.9%	100.0%
Column Percent	.5%	.8%	.7%	.6%	.5%	.8%	.3%	.5%	.6%	.8%	.5%
Writing	18	5	4	2	75	2	42	54	12	5	219
Row Percent	8.2%	2.3%	1.8%	.9%	34.2%	.9%	19.2%	24.7%	5.5%	2.3%	100.0%
Column Percent	.4%	.3%	.2%	.1%	1.0%	.1%	.5%	.8%	.4%	1.0%	.6%
Chem info services	24	5	15	12	116	10	82	62	16	3	345
Row Percent	7.0%	1.4%	4.3%	3.5%	33.6%	2.9%	23.8%	18.0%	4.6%	.9%	100.0%
Column Percent	.5%	.3%	.6%	.4%	1.5%	.7%	.9%	1.0%	.6%	.6%	.9%
Computers	53	14	17	26	51	5	60	53	20	6	305
Row Percent	17.4%	4.6%	5.6%	8.5%	16.7%	1.6%	19.7%	17.4%	6.6%	2.0%	100.0%
Column Percent	1.1%	.9%	.7%	.9%	.7%	.3%	.7%	.8%	.7%	1.2%	.8%
Consulting	203	59	26	82	116	31	218	193	121	13	1062
Row Percent	19.1%	5.6%	2.4%	7.7%	10.9%	2.9%	20.5%	18.2%	11.4%	1.2%	100.0%
Column Percent	4.3%	3.7%	1.1%	2.8%	1.5%	2.1%	2.5%	3.0%	4.2%	2.6%	2.7%
Other	164	48	58	92	213	48	240	240	78	20	1201
Row Percent	13.7%	4.0%	4.8%	7.7%	17.7%	4.0%	20.0%	20.0%	6.5%	1.7%	100.0%
Column Percent	3.5%	3.0%	2.4%	3.2%	2.8%	3.3%	2.8%	3.7%	2.7%	4.0%	3.1%
No Answer	1139	511	831	783	1627	479	1620	1428	739	129	9286
Row Percent	12.3%	5.5%	8.9%	8.4%	17.5%	5.2%	17.4%	15.4%	8.0%	1.4%	100.0%
Column Percent	24.1%	32.2%	33.9%	26.9%	21.4%	33.0%	18.7%	22.0%	25.5%	25.9%	23.6%
Total	4719	1588	2452	2912	7612	1453	8645	6496	2899	498	39274
Row Percent	12.0%	4.0%	6.2%	7.4%	19.4%	3.7%	22.0%	16.5%	7.4%	1.3%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.9.1

ALL RESPONDENTS
by GEOGRAPHIC REGION and WORK SPECIALTY
1990 Survey of ACS Members

WORK SPECIALITY	GEOGRAPHIC REGION										Total
	Pacific	Mount	WN Central	WS Central	EN Central	ES Central	Middle Atl	S Atl	New England	No Answer	
Chemical engineering	228	93	110	234	331	88	518	309	178	19	2108
Row Percent	10.8%	4.4%	5.2%	11.1%	15.7%	4.2%	24.6%	14.7%	8.4%	.9%	100.0%
Column Percent	4.8%	5.8%	4.5%	8.0%	4.3%	6.0%	6.0%	4.7%	6.1%	3.8%	5.4%
Biochemistry	294	80	175	153	398	76	412	354	203	21	2166
Row Percent	13.6%	3.7%	8.1%	7.1%	18.4%	3.5%	19.0%	16.3%	9.4%	1.0%	100.0%
Column Percent	6.2%	5.0%	7.1%	5.2%	5.2%	5.2%	4.8%	5.4%	7.0%	4.2%	5.5%
Biotechnology	198	24	55	16	119	9	134	124	86	9	774
Row Percent	25.6%	3.1%	7.1%	2.1%	15.4%	1.2%	17.3%	16.0%	11.1%	1.2%	100.0%
Column Percent	4.2%	1.5%	2.2%	.5%	1.6%	.6%	1.5%	1.9%	3.0%	1.8%	2.0%
General chemistry	237	81	147	151	357	84	355	291	139	14	1856
Row Percent	12.8%	4.4%	7.9%	8.1%	19.2%	4.5%	19.1%	15.7%	7.5%	.8%	100.0%
Column Percent	5.0%	5.1%	6.0%	5.2%	4.7%	5.8%	4.1%	4.5%	4.8%	2.8%	4.7%
Agricultural chemistry	153	32	145	63	197	33	226	235	40	14	1138
Row Percent	13.4%	2.8%	12.7%	5.5%	17.3%	2.9%	19.9%	20.7%	3.5%	1.2%	100.0%
Column Percent	3.2%	2.0%	5.9%	2.2%	2.6%	2.3%	2.6%	3.6%	1.4%	2.8%	2.9%
Analytical chemistry	763	326	444	544	1400	281	1424	1094	414	68	6758
Row Percent	11.3%	4.8%	6.6%	8.0%	20.7%	4.2%	21.1%	16.2%	6.1%	1.0%	100.0%
Column Percent	16.1%	20.5%	18.0%	18.6%	18.4%	19.3%	16.4%	16.8%	14.3%	13.6%	17.2%
Clinical chemistry	61	7	31	16	100	17	72	71	32	5	412
Row Percent	14.8%	1.7%	7.5%	3.9%	24.3%	4.1%	17.5%	17.2%	7.8%	1.2%	100.0%
Column Percent	1.3%	.4%	1.3%	.5%	1.3%	1.2%	.8%	1.1%	1.1%	1.0%	1.0%
Environmental chemistry	484	207	158	247	468	112	470	558	191	32	2927
Row Percent	16.5%	7.1%	5.4%	8.4%	16.0%	3.8%	16.1%	19.1%	6.5%	1.1%	100.0%
Column Percent	10.2%	13.0%	6.4%	8.5%	6.1%	7.7%	5.4%	8.6%	6.6%	6.4%	7.4%

Table 10.9.1 (Continued)

WORK SPECIALITY	GEOGRAPHIC REGION										Total
	Pacific	Mount	WN Central	WS Central	EN Central	ES Central	Middle Atl	S Atl	New England	No Answer	
Inorganic chemistry	154	85	105	125	294	69	320	227	119	20	1518
Row Percent	10.1%	5.6%	6.9%	8.2%	19.4%	4.5%	21.1%	15.0%	7.8%	1.3%	100.0%
Column Percent	3.3%	5.3%	4.3%	4.3%	3.9%	4.7%	3.7%	3.5%	4.1%	4.0%	3.9%
Materials science	219	66	93	72	286	49	327	266	171	19	1568
Row Percent	14.0%	4.2%	5.9%	4.6%	18.2%	3.1%	20.9%	17.0%	10.9%	1.2%	100.0%
Column Percent	4.6%	4.2%	3.8%	2.5%	3.8%	3.4%	3.8%	4.1%	5.9%	3.8%	4.0%
Medicinal-Pharmaceutical	174	40	118	54	362	38	661	332	144	32	1955
Row Percent	8.9%	2.0%	6.0%	2.8%	18.5%	1.9%	33.8%	17.0%	7.4%	1.6%	100.0%
Column Percent	3.7%	2.5%	4.8%	1.9%	4.8%	2.6%	7.6%	5.1%	5.0%	6.4%	5.0%
Organic chemistry	477	154	306	372	931	169	1119	678	331	49	4586
Row Percent	10.4%	3.4%	6.7%	8.1%	20.3%	3.7%	24.4%	14.8%	7.2%	1.1%	100.0%
Column Percent	10.1%	9.7%	12.4%	12.8%	12.2%	11.6%	12.9%	10.4%	11.4%	9.8%	11.7%
Physical chemistry	312	125	125	170	388	85	462	338	169	24	2198
Row Percent	14.2%	5.7%	5.7%	7.7%	17.7%	3.9%	21.0%	15.4%	7.7%	1.1%	100.0%
Column Percent	6.6%	7.9%	5.1%	5.8%	5.1%	5.8%	5.3%	5.2%	5.8%	4.8%	5.6%
Polymer chemistry	259	47	143	244	904	113	842	557	274	42	3425
Row Percent	7.6%	1.4%	4.2%	7.1%	26.4%	3.3%	24.6%	16.3%	8.0%	1.2%	100.0%
Column Percent	5.5%	3.0%	5.8%	8.4%	11.9%	7.8%	9.7%	8.6%	9.4%	8.4%	8.7%
Other chemical science	83	45	37	82	177	43	199	174	61	8	909
Row Percent	9.1%	5.0%	4.1%	9.0%	19.5%	4.7%	21.9%	19.1%	6.7%	.9%	100.0%
Column Percent	1.8%	2.8%	1.5%	2.8%	2.3%	3.0%	2.3%	2.7%	2.1%	1.6%	2.3%
Business Administration	144	43	58	88	248	38	313	220	81	16	1249
Row Percent	11.5%	3.4%	4.6%	7.0%	19.9%	3.0%	25.1%	17.6%	6.5%	1.3%	100.0%
Column Percent	3.0%	2.7%	2.4%	3.0%	3.3%	2.6%	3.6%	3.4%	2.8%	3.2%	3.2%

Table 10.9.1 (Continued)

WORK SPECIALITY	GEOGRAPHIC REGION										Total
	Pacific	Mount	WN Central	WS Central	EN Central	ES Central	Middle Atl	S Atl	New England	No Answer	
Other non-chem	305	95	122	155	368	90	443	441	170	39	2228
Row Percent	13.7%	4.3%	5.5%	7.0%	16.5%	4.0%	19.9%	19.8%	7.6%	1.8%	100.0%
Column Percent	6.5%	6.0%	5.0%	5.3%	4.8%	6.2%	5.1%	6.8%	5.9%	7.8%	5.7%
No Answer	181	40	88	131	291	61	360	241	100	68	1561
Row Percent	11.6%	2.6%	5.6%	8.4%	18.6%	3.9%	23.1%	15.4%	6.4%	4.4%	100.0%
Column Percent	3.8%	2.5%	3.6%	4.5%	3.8%	4.2%	4.2%	3.7%	3.4%	13.6%	4.0%
Total	4726	1590	2460	2917	7619	1455	8657	6510	2903	499	39336
Row Percent	12.0%	4.0%	6.3%	7.4%	19.4%	3.7%	22.0%	16.5%	7.4%	1.3%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.10.1

ALL RESPONDENTS
by GEOGRAPHIC REGION and SEX
1990 Survey of ACS Members

SEX	SEX			Total
	Men	Women	No Answer	
Pacific	3819	883	23	4725
Row Percent	80.8%	18.7%	.5%	100.0%
Column Percent	11.9%	12.5%	11.9%	12.0%
Mountain	1302	286	2	1590
Row Percent	81.9%	18.0%	.1%	100.0%
Column Percent	4.1%	4.1%	1.0%	4.0%
West North Central	2047	408	5	2460
Row Percent	83.2%	16.6%	.2%	100.0%
Column Percent	6.4%	5.8%	2.6%	6.3%
West South Central	2469	436	12	2917
Row Percent	84.6%	14.9%	.4%	100.0%
Column Percent	7.7%	6.2%	6.2%	7.4%
East North Central	6280	1301	38	7619
Row Percent	82.4%	17.1%	.5%	100.0%
Column Percent	19.6%	18.5%	19.6%	19.4%
East South Central	1207	243	5	1455
Row Percent	83.0%	16.7%	.3%	100.0%
Column Percent	3.8%	3.5%	2.6%	3.7%
Middle Atlantic	7066	1556	35	8657
Row Percent	81.6%	18.0%	.4%	100.0%
Column Percent	22.0%	22.1%	18.0%	22.0%
South Atlantic	5224	1256	30	6510
Row Percent	80.2%	19.3%	.5%	100.0%
Column Percent	16.3%	17.8%	15.5%	16.6%
New England	2327	562	14	2903
Row Percent	80.2%	19.4%	.5%	100.0%
Column Percent	7.2%	8.0%	7.2%	7.4%
No Answer	359	110	30	499
Row Percent	71.9%	22.0%	6.0%	100.0%
Column Percent	1.1%	1.6%	15.5%	1.3%
Total	32100	7041	194	39335
Row Percent	81.6%	17.9%	.5%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%

Table 10.11.1

ALL RESPONDENTS
by GEOGRAPHIC REGION and HIGHEST DEGREE
1990 Survey of ACS Members

GEOGRAPHIC REGION	HIGHEST DEGREE				Total
	BS	MS	PhD	No Answer	
Pacific	1124	844	2727	31	4726
Row Percent	23.8%	17.9%	57.7%	.7%	100.0%
Column Percent	11.6%	11.5%	12.3%	13.5%	12.0%
Mountain	408	261	915	6	1590
Row Percent	25.7%	16.4%	57.5%	.4%	100.0%
Column Percent	4.2%	3.6%	4.1%	2.6%	4.0%
West North Central	664	397	1381	18	2460
Row Percent	27.0%	16.1%	56.1%	.7%	100.0%
Column Percent	6.9%	5.4%	6.2%	7.9%	6.3%
West South Central	713	522	1665	17	2917
Row Percent	24.4%	17.9%	57.1%	.6%	100.0%
Column Percent	7.4%	7.1%	7.5%	7.4%	7.4%
East North Central	2121	1481	3971	46	7619
Row Percent	27.8%	19.4%	52.1%	.6%	100.0%
Column Percent	22.0%	20.2%	18.0%	20.1%	19.4%
East South Central	401	244	804	6	1455
Row Percent	27.6%	16.8%	55.3%	.4%	100.0%
Column Percent	4.2%	3.3%	3.6%	2.6%	3.7%
Middle Atlantic	1986	1726	4894	51	8657
Row Percent	22.9%	19.9%	56.5%	.6%	100.0%
Column Percent	20.6%	23.5%	22.1%	22.3%	22.0%
South Atlantic	1460	1158	3869	23	6510
Row Percent	22.4%	17.8%	59.4%	.4%	100.0%
Column Percent	15.1%	15.8%	17.5%	10.0%	16.5%
New England	636	609	1640	18	2903
Row Percent	21.9%	21.0%	56.5%	.6%	100.0%
Column Percent	6.6%	8.3%	7.4%	7.9%	7.4%
No Answer	145	100	241	13	499
Row Percent	29.1%	20.0%	48.3%	2.6%	100.0%
Column Percent	1.5%	1.4%	1.1%	5.7%	1.3%
Total	9658	7342	22107	229	39336
Row Percent	24.6%	18.7%	56.2%	.6%	100.0%
Column Percent	100.0%	100.0%	100.0%	100.0%	100.0%

American Chemical Society

1155 SIXTEENTH STREET, N.W.
WASHINGTON, D.C. 20036
Phone (202) 872-4534

JOHN K CRUM
Executive Director

February 20, 1990

Dear Colleague:

Each year the American Chemical Society studies the economic status of the U.S. chemical profession by surveying a sample of ACS members. This year, we are asking every ACS member in the U.S. who is not over 70 years of age and neither retired nor a student to participate. The survey is sponsored by the Joint Board-Council Committee on Economic Status.

The questionnaire before you touches on three topics: salary, the demographic composition of the membership, and members' jobs: how they are structured and how members rate them. These questions asked of such a large group will allow us to report to you on many more groups within the ACS than was previously possible. Information will now be available for more chemistry specialties, more industrial sectors, smaller geographic areas, and other groups such as women chemists, chemists employed in government, chemists with the master's as the highest degree, chemists employed part-time, and handicapped chemists.

Your participation will be an important service to your colleagues, because a high response rate is needed to assure accurate results. Please take a few minutes now, while the survey form is before you, to fill out the questionnaire and return it in the enclosed postage-paid envelope. The procedure is strictly anonymous, and the information you provide will be combined with returns from other members so that only aggregated data will be available.

Findings will be reported to ACS members in several ways in 1990. Preliminary results will be presented at the spring meeting in Boston and a summary of the findings will appear in *Chemical and Engineering News* early in the summer. Detailed analyses will be published by the ACS as *Salaries 1990* and *Women Chemists 1990*.

Please feel free to use the back of the questionnaire for whatever comments or suggestions you might care to make.

Thank you for your assistance.

Sincerely,

John K Crum

Encl.

AMERICAN CHEMICAL SOCIETY
1990 Comprehensive Salary and Employment Status Survey

PART I. EDUCATION AND EMPLOYMENT STATUS

1. Please indicate the year in which you earned any of the following degrees:

Bachelor's	19__ __	1-2
Master's	19__ __	3-4
Doctorate	19__ __	5-6

2. Please check the appropriate box in each column.

	Field of highest degree	The ONE specialty most related to your current or most recent job	
Chemical engineering	☐ 01	☐ 01	
Biochemistry	☐ 02	☐ 02	
Biotechnology	☐ 03	☐ 03	
General chemistry	☐ 04	☐ 04	
Agricultural/food chemistry	☐ 05	☐ 05	
Analytical chemistry	☐ 06	☐ 06	
Clinical chemistry	☐ 07	☐ 07	
Environmental chemistry	☐ 08	☐ 08	
Inorganic chemistry	☐ 09	☐ 09	
Materials science	☐ 10	☐ 10	
Medicinal/pharmaceutical chemistry	☐ 11	☐ 11	
Organic chemistry	☐ 12	☐ 12	
Physical chemistry	☐ 13	☐ 13	
Polymer chemistry	☐ 14	☐ 14	
Other chemical science	☐ 15	☐ 15	
Business Administration	☐ 16	☐ 16	
Other Non-chemistry	☐ 17	☐ 17	7-10

3. Please enter your primary employment status as of March 1, 1990. Choose the one category that best fits your situation.

Employed full-time (35 hours or more per week)	☐ 1	Go to 9
Employed part-time	☐ 2	Go to 7
Postdoctoral or other fellowship	☐ 3	Go to 9
Not employed but actively seeking employment	☐ 4	Go to 4
Not employed and NOT seeking employment	☐ 5	Go to 6

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4. If you were NOT EMPLOYED BUT ACTIVELY SEEKING EMPLOYMENT on March 1, 1990, how long had you been unemployed?

Less than 1 month	☐ 1
1 to 3 months	☐ 2
4 to 6 months	☐ 3
7 to 12 months	☐ 4
More than 1 year	☐ 5

12

5. If you were NOT EMPLOYED BUT ACTIVELY SEEKING EMPLOYMENT on March 1, 1990, was your job search restricted by?

Inability to relocate	☐ 1	Go to 10
Family responsibilities	☐ 2	
Need for part-time employment	☐ 3	
Other	☐ 4	
No restrictions	☐ 5	

13

6. If you were NOT EMPLOYED AND NOT SEEKING EMPLOYMENT on March 1, 1990, what was the most important reason for not seeking work?

Temporary health or personal reasons	☐ 1	Go to 10
Tending to family responsibilities	☐ 2	
Suitable job not available	☐ 3	
Student	☐ 4	
Retired	☐ 5	
Other	☐ 6	
No reason	☐ 7	

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7. If your current or most recent job is PART-TIME, please indicate the fraction of full-time that best describes that position.

1/4 or less	☐ 1
1/3	☐ 2
1/2	☐ 3
2/3	☐ 4
3/4 or more	☐ 5

15

8. If your current or most recent job is PART-TIME, what is the main reason for that status?

Prefer part-time work	☐ 1
Full-time work not available	☐ 2
Constraints due to family or marital status	☐ 3
Other	☐ 4

16

9. If you are CURRENTLY EMPLOYED, how long have you worked for your current employer?

__ __ years __ __ months 17-20

10. Regardless of your current status, was there any period when you were NOT EMPLOYED AND ACTIVELY SEEKING EMPLOYMENT in calendar year 1989?

Yes ☐ 1 No ☐ 2 21

IF YES, how many total weeks were you NOT EMPLOYED AND ACTIVELY SEEKING EMPLOYMENT during calendar year 1989?

_____ weeks (ENTER A NUMBER FROM 1 TO 52) 22-23

11. What are the first three digits of the ZIP CODE of your current or most recent place of employment?

__ __ __ 24-26

12. Since receiving your bachelor's degree, have you had any periods when you were neither employed nor attending school?

Yes ☐ 1 No ☐ 2 27

_____ years _____ months 28-31

Continued →

PART II. QUESTIONS ABOUT YOURSELF

1. Your sex:

Male ☐ 1 Female ☐ 2 32

2. Your marital status:

Single, never married ☐ 1
Single, previously married ☐ 2
Currently married to a chemist ☐ 3
Currently married to a scientist, non-chemist ☐ 4
Currently married to a non-scientist ☐ 5 33

3. Do you have dependent children living at home?

Yes ☐ 1 No ☐ 2 34

IF YES, please indicate the number in each age category:

Less than 6 years old _____ 35
7 to 17 years old _____ 36
18 or older _____ 37

4. Age at last birthday before March 1, 1990:

___ ___ years old 38-39

5. What is the usual degree of difficulty you have with—

a. Seeing the words and letters in ordinary newspaper print (while wearing glasses or contact lenses if you usually wear them).

No difficulty ☐ 1
Some difficulty ☐ 2
Great difficulty or unable to do ☐ 3 40

b. Hearing what is said in a normal conversation with another person (while wearing a hearing aid if you usually wear one).

No difficulty ☐ 1
Some difficulty ☐ 2
Great difficulty or unable to do ☐ 3 41

c. Walking without assistance (human or mechanical) or using stairs.

No difficulty ☐ 1
Some difficulty ☐ 2
Great difficulty or unable to do ☐ 3 42

d. Lifting/carrying objects associated with your normal occupational duties.

No difficulty ☐ 1
Some difficulty ☐ 2
Great difficulty or unable to do ☐ 3 43

6. Citizenship or visa status:

U.S. native ☐ 1
U.S. naturalized ☐ 2
U.S. permanent resident visa ☐ 3
Other visa ☐ 4 44

7. What is your racial background?

American Indian or Alaskan Native ☐ 1
Black ☐ 2
Chinese ☐ 3
Japanese ☐ 4
Korean ☐ 5
Subcontinental Indian ☐ 6
Other Asian or Pacific Islander ☐ 7
White ☐ 8
Other ☐ 9 45

8. Are you of Spanish/Hispanic origin or descent?

Yes ☐ 1 No ☐ 2 46

IF YOU ARE EMPLOYED, EITHER FULL TIME OR PART TIME, PLEASE ANSWER PART III., CURRENT INCOME AND JOB EVALUATION.

IF YOU ARE NOT CURRENTLY EMPLOYED, PLEASE SKIP TO PART IV, CURRENT OR MOST RECENT JOB.

PART III. CURRENT INCOME AND JOB EVALUATION

1. BASE ANNUAL SALARY from PRINCIPAL JOB as of March 1, 1990. (DO NOT INCLUDE bonuses, earnings from second job, overtime work, summer teaching, or other supplemental earnings.) If on a 9 or 10 month contract, report the 9 or 10 month salary rather than an annualized salary.

$ _____ per year 47-53

2. TOTAL PROFESSIONAL INCOME during calendar year 1989. (INCLUDE consulting fees, base annual salary, bonuses, earnings from second job, overtime, summer teaching, and other supplemental earnings.)

$ _____ per year 54-60

PLEASE EVALUATE THE FOLLOWING STATEMENTS AND INDICATE TO WHAT EXTENT YOU AGREE.

3. My employer pays me fairly in comparison with other employees who have similar duties and responsibilities.

Strongly agree ☐ 1
Agree ☐ 2
No Opinion ☐ 3
Disagree ☐ 4
Strongly disagree ☐ 5 61

4. My chances for PROFESSIONAL advancement as a scientist within my company or organization are as good as those of other employees with equivalent qualifications and experience.

Strongly agree ☐ 1
Agree ☐ 2
No Opinion ☐ 3
Disagree ☐ 4
Strongly disagree ☐ 5 62

Continued →

5. My chances for MANAGERIAL or administrative advancement within my company or organization are as good as those of other employees with equivalent qualifications and experience.

- Strongly agree ☐ 1
- Agree ☐ 2
- No Opinion ☐ 3
- Disagree ☐ 4
- Strongly disagree ☐ 5

63

6. I feel that my work is challenging.

- Strongly agree ☐ 1
- Agree ☐ 2
- No Opinion ☐ 3
- Disagree ☐ 4
- Strongly disagree ☐ 5

64

7. I have the resources available to do my work well.

- Strongly agree ☐ 1
- Agree ☐ 2
- No Opinion ☐ 3
- Disagree ☐ 4
- Strongly disagree ☐ 5

65

8. Overall, the working conditions (e.g., hours, amount of work, physical surroundings, location) at my company or organization are good.

- Strongly agree ☐ 1
- Agree ☐ 2
- No Opinion ☐ 3
- Disagree ☐ 4
- Strongly disagree ☐ 5

66

9. Most of the time, I'm satisfied with my job.

- Strongly agree ☐ 1
- Agree ☐ 2
- No Opinion ☐ 3
- Disagree ☐ 4
- Strongly disagree ☐ 5

67

10. Is your immediate supervisor a:

Man ☐ 1 Woman ☐ 2

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PART IV. CURRENT OR MOST RECENT PRIMARY JOB.

IF YOUR CURRENT OR MOST RECENT EMPLOYER IS NOT AN ACADEMIC INSTITUTION, GO TO SECTION B ON THE NEXT PAGE.

A. CURRENT OR MOST RECENT EMPLOYMENT IS IN AN ACADEMIC INSTITUTION.

1. Current (or most recent) principal employer:

College or university where the highest degree offered in chemistry or chemical engineering is:

- Associate ☐ 1
- Bachelor's ☐ 2
- Master's ☐ 3
- Doctorate ☐ 4

- Medical or professional school ☐ 5
- High school ☐ 6

69

2. Your employer is a:

- Public institution ☐ 1
- Private institution ☐ 2

70

3. Your academic rank:

- Full professor ☐ 1
- Associate professor ☐ 2
- Assistant professor ☐ 3
- Visiting or adjunct professor, instructor, lecturer ☐ 4
- Non-teaching research appointment ☐ 5
- Other nonfaculty ☐ 6
- My institution does not have ranks ☐ 7

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4. Have you been granted tenure?

- Yes ☐ 1
- Not tenured, in tenure track ☐ 2
- Not tenured, not in tenure track ☐ 3
- Not applicable ☐ 4

72

5. Your basic contract is for a period of:

- 9 or 10 months ☐ 1
- 11 or 12 months ☐ 2

73

6. About what fraction of your total working time in the academic year is devoted to:

Teaching	_____ %	74-76
Research	_____ %	77-79
Administration	_____ %	80-82
Other	_____ %	83-85
TOTAL	100.0	

7. What was your principal professional activity during the SUMMER of 1989?

- Teaching ☐ 1
- Funded research or study ☐ 2
- Unpaid scholarly/academic ☐ 3
- Administration ☐ 4
- Consulting ☐ 5
- Non-academic employment ☐ 6
- Other ☐ 7

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THANK YOU. YOU HAVE COMPLETED THE QUESTIONNAIRE. PLEASE USE THE BLANK SPACE ON THE BACK OF THIS FORM FOR COMMENTS.

B. CURRENT OR MOST RECENT EMPLOYMENT IS *NOT* IN AN ACADEMIC INSTITUTION.

1. Current (or most recent) principal employer:

- Self-employed ☐ 01
- Private industry
  - Non-manufacturing _____ ☐ 02
  - Manufacturing
    - Aerospace ☐ 03
    - Chemicals
      - Basic chemicals ☐ 04
      - Specialty chemicals ☐ 05
      - Agricultural chemicals ☐ 06
      - Biochemical products ☐ 07
    - Coatings, paints, inks ☐ 08
    - Electronics ☐ 09
    - Food ☐ 10
    - Glass, ceramics ☐ 11
    - Paper ☐ 12
    - Petroleum, natural gas ☐ 13
    - Pharmaceuticals, personal care ☐ 14
    - Plastics ☐ 15
    - Rubber ☐ 16
    - Soaps, detergents, surfactants ☐ 17
    - Steel or ferrous metals ☐ 18
    - Other metals, minerals ☐ 19
    - Other manufactures _____ ☐ 20
- Government
  - Federal (civilian) ☐ 21
  - State or local ☐ 22
  - Military ☐ 23
- Other non-academic
  - Hospital, independent laboratory ☐ 24
  - Non-profit organization, other research institution ☐ 25
- Other employment ☐ 26 87-88

2. Check the ONE work function that best describes your job.

- Research and Development
  - Management or administration of R&D ☐ 01
  - Basic research ☐ 02
  - Applied research, development, design ☐ 03
- General management, administration (other than research and development) ☐ 04
- Marketing, sales, purchasing, technical service, economic evaluation ☐ 05
- Production, quality control ☐ 06
- Health and safety/regulatory affairs ☐ 07
- Forensic analysis, other laboratory analysis ☐ 08
- Teaching ☐ 09
- Writing, editing, abstracting ☐ 10
- Chemistry information services ☐ 11
- Computer programming, analysis, design ☐ 12
- Consulting ☐ 13
- Other ☐ 14 89-90

3. Is your job classified as a technician position?

Yes ☐ 1 No ☐ 2 91

4. Were you eligible for a bonus during calendar 1989?

Yes ☐ 1 No ☐ 2 92

5. Did you receive a bonus during calendar 1989?

Yes ☐ 1 No ☐ 2 93

If YES, please indicate amount $ _____ 94-100

6. How many people do you supervise, directly or indirectly? Please enter the actual number if it is between 0 and 99; 99 if the number is 100 or more.

- Professionals ☐☐ 101-102
- Technicians ☐☐ 103-104
- Others, including production workers ☐☐ 105-106

7. LEVEL OF RESPONSIBILITY: Please examine the statements within each of the four groups (Duties, Technical Decisions and Recommendations, Supervision Received, and Supervision Exercised) and, within each group, check the box of the statement that most closely corresponds to your responsibility on the job. (Check only one in each group.)

a. Duties:

- I receive on-the-job training working on simple projects or assisting more senior staff ☐ 1
- I perform responsible and varied assignments within projects ☐ 2
- I plan, conduct, and coordinate projects of some complexity ☐ 3
- I undertake long-term and short-term planning and supervision of projects. I make decisions on work programs and have budgetary control of projects. ☐ 4
- I have full managerial responsibility for a function with full responsibility for the operation of a budget and long term planning ☐ 5 107

b. Technical Decisions and Recommendations:

- I am responsible for minor technical details only, all other matters being checked ☐ 1
- I am responsible for technical detail which is reviewed overall ☐ 2
- I am responsible for technical matters but am subject to occasional review ☐ 3
- I have full technical responsibility for projects ☐ 4
- I am responsible for all technical matters including the delegation of responsibility ☐ 5 108

Continued →

c. Supervision Received:

My work is assigned with detailed instructions, guidance being always available. My results are subject to close scrutiny..... ☐ 1

My work is assigned in terms of detailed objectives and priorities, guidance being available on problems and unusual features. My work is subject to scrutiny..... ☐ 2

My work is assigned in terms of general objectives and priorities, guidance being available on policy or unusually complex problems. My work is reviewed for effectiveness only..... ☐ 3

My work is such that I receive executive instruction on broad overall objectives and it is reviewed only for its general effectiveness and adherence to policy..... ☐ 4

My work is unsupervised, other than I comply with the policy decided within the governing body..... ☐ 5

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d. Supervision Exercised:

I have no authority but may give technical guidance to juniors working on the same project..... ☐ 1

I have no managerial responsibilities for qualified staff but may be assigned graduates, technicians, or other juniors as assistants from time to time..... ☐ 2

I supervise a group of qualified staff, technicians, and other employees. I assign and review their work. I can recommend on the selection, discipline, rating, training, and perhaps rate of pay..... ☐ 3

I am responsible for leaders of groups containing qualified staff, technicians, and other employees. I give guidance on policy and complex technical matters delegating responsibility for discipline, rating, training, and rates of pay..... ☐ 4

I have full control over senior staff who are in turn responsible for groups of qualified staff and other employees..... ☐ 5

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Comments:

THANK YOU FOR YOUR PARTICIPATION.
PLEASE RETURN THIS QUESTIONNAIRE TO:
American Chemical Society
Room 610
1155 16th Street, N.W.
Washington, DC 20036

ACS MEMBER SERVICES PUBLICATIONS

Salaries: The Society annually surveys the ACS membership, gathering detailed information on member chemists and chemical engineers. The reports based on this survey contain statistical tables describing the respondents' employment status, employer, work function and specialty, salaries, and demographic characteristics.

Reports are available for each year from 1973 through the current year. For 1987, four separate reports are available: *1987 Salaries of Non-Academic Chemists, 1987 Salaries of Non-Academic Chemical Engineers, 1987 Salaries of Academic Chemists, and 1987 Employment Status and Demographic Characteristics of ACS Members.*

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Women Chemists 1980: A supplemental report on the ACS's 1980 Survey of Salaries and Employment.

Women Chemists 1985: A supplemental report on the ACS's 1985 Survey of Salaries and Employment.

Women Chemists 1990: A supplemental report on the ACS's 1990 Survey of Salaries and Employment.

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